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ORIGINAL ARTICLES

FINAL RESULTS OF THYROIDECTOMY FOR EXOPHTHALMIC GOITRE*

MAX BALLIN, M. D., and J. W. VAUGHAN, M. D.

Detroit, Michigan

It is now most generally conceded that operative procedure gives, in the majority of cases, the only permanent cure for Exophthalmic goitre; many other methods of treatment have had their advocates, and some have been of much benefit, but with no other mode of treatment is the time of disability so much shortened, or the permanency of the result so well assured.

Just when to operate is now a much mooted question, as is also the preliminary treatment which most surgeons agree must be adopted in the severer types before operation can safely be performed. Such conclusions can best be drawn from the study of a number of cases so that we may see where we have erred and correct the faults.

In a review of the case herein reported, one fact predominates, namely, that the risk accompanying operation in those cases which previous to the appearance of one or more of the symptoms which characterize Graves disease, possessed some cystic or adenomatous enlargement of the gland, is far less than in those individuals where the thyroid enlargement and other symptom complex, occur simultaneously.

For this reason we give preference to the division of these cases into two large classes; of which the latter is designated by the term "Primary Exophthalmic Goitre," and the former "Secondary Exophthalmic Goitre."

Of the forty-seven cases considered in this review, twenty-one belong to the first class, and twenty-six to the second. A glance at the severity of previous symptoms will show that these are almost invariably more marked in the case of Primary Exophthalmic Goitre, and also that all cases in which operation might be considered as contributory to death, belong to this division. This fact is of importance when giving a probable prognosis as to the outcome of operation and, the fact that the patient had a glandular enlargement previous to the appearance of exophthalmic symptoms is in favor of the patient. This statement is easily explained when we consider that the present etiological factor in the causation of exophthalmic goitre is supposed to be either an increased thyroid secretion or a chemically altered

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secretion of the gland. This being so, in those glands which normally have their functioning amount of tissue lessened, owing to the destruction of glandular tissue due to the presence of multiple or single cysts—we would naturally expect the symptoms to be of less severity than in those cases in which an entire glandular lobe is involved in the diseased process. Again, it is the opinion of the writers that exophthalmic goitre is a true infectious process. This being so, in those cases which belong to the secondary class the infection is usually limited to the lobe in which the cyst is found, which reduces materially the amount of true thyroid tissue involved. In the primary form the well-developed fascia may or may not limit the infection to one single lobe. However, one lobe is generally of greater bulk than the other, but even in this case, much more thyroid tissue is involved. Of the cases reported here both males dated the beginning of their illness from attacks of typhoid fever. Both of these were primary cases. Two of the eight primary cases in unmarried women also recall typhoid fever as an instigating cause, while married women who have borne no children furnish two more.

By far the majority of cases which present the symptoms of exophthalmic goitre are furnished from the ranks of married women. Just what the connection between pregnancy and Graves disease is, we are unable to state, but such a connection can be considered without error, we believe, when we remember that some thyroidal changes are certainly connected with menstrual function. Of these cases in our report, three gave histories of miscarriages, one had had "inflammation of the bowels," and another "articular rheumatism." This, we believe, adds weight to the infection theory which in itself causes either an increased thyroid secretion or a modified chemical secretion which produces the symptom complex of exophthalmic goitre. Such a condition can be produced only by the various bacteria, such as the typhoid bacillus, that do not depend upon phagocytic action for the recovery of the patient. The pyogenic organisms would be more likely to cause abscess in the gland and their entrance into its structure would most assuredly be much less frequent than is the case of those bacteria which are always present in the circulating blood stream when the disease for which they are responsible is present.

The data that we have tabulated under Chart I and II would be of no value if we considered each case singly, but when taken as a whole, certain definite conclusions may be drawn without a great margin of error. We have attempted to gauge from these cases what the average result of operative procedure is and how soon after such procedure results may be looked for in each and every case.

In considering each individual case belonging to the primary type case No. 1, while showing rather severe symptoms of this disease, may be considered as a favorable case from an operative standpoint. The disease was of comparatively short duration, and the pulse fell rapidly and remained lowered under enforced rest and the ice-bag. The exophthalmos was of slight degree, so that no permanent eye change will result and the case may well be classed among those of permanent relief. Cases two, three and four are similar in all important details. Case five was one of much longer standing, and consequently the exophthalmos will never entirely disappear. Some degenerative heart changes are probably present so that the best result that can be expected is one of permanent improvement. Case six, while of severer type than case five

at the time of operation, still was of shorter duration, and consequently responded more rapidly to operation. The result should be a permanent cure. Number seven belongs to the same class as numbers one, two and three. This patient had previously suffered from very severe symptoms, but at the time of operation might be classed as an "interval case." Case eight was one of great severity when the from quite severe symptoms which were better at the time of operation. They were exceedingly favorable cases. Case twelve is the only one in which operation other than partial thyroidectomy was performed. The symptoms here were of great severity at the time of operation and consequently simple ligation of the arteries after the method of Kocher was deemed best. Case thirteen was one of

PRIMARY EXOPTHALMIC GOITRE.

Case No.	Tremor.	Palpitation.	Intestinal Symptoms.	Exopthalmos.	Pulse before operation.	Days in bed before oper.	Pulse after operation.	Pulse on leaving hospital	Day of leaving after oper.	Result.
1 Miss F.	++	++	—	+	112-86	4	120-84	84	11th	Cure.
2. Mrs H.	++	++	—	+	110-90	2	120-80	84	10th	Cure.
3. Miss R.	+	++	—	+	110-80	7	156-60	64	14th	Cure.
4. Mrs T.	++	+	++	++	110-70	3	100-72	72	12th	Cure.
5. Mrs F.	++	++	+	++	100-90	3	136-76	110	16th	Improved.
6. Mrs E.	++	++	+	+	124-92	2	128-80	98	13th	Cure.
7. Mrs Q.	++	+	—	+	108-94	2	100-74	80	12th	Cure.
8. Miss S.	+++	+++	++	++	128-108	2	140-100	106	12th	Improved.
9. Mrs S.	++	++	—	+	112-84	1	106-74	74	7th	Cure.
10. Mrs Z.	++	++	—	+	120-90	1	130-76	88	12th	Cure.
11. Mrs S.	++	++	—	+	100-90	2	150-76	80	12th	Cure.
12. Miss K.	++	++	+	++	120-100	2	132-88	106	10th	Improved.
13. Mrs M.	++	++	+	++	144-100	12	130-64	80	18th	Cure.
14. Miss M.	++	++	+	++	138-110	8	156-130			Died 24 hrs.
15. Miss A.	++	++	+	++	140-118	14	150-90	90	14th	Improved.
16. Mrs B.	++	++	+	++	120-90	7	160-92	104	20th	Improved.
17 Miss S.	++	++	+	++	126-90	3	150-70	90	11th	Improved.
18 Mrs.	+++	+++	++	++	160?-130	5	160?			Died 2nd Day.
19 Mrs. B.	+++	+++	++	++	160?-140?	14				Died Preliminary Narcosis.
20 Mrs. P.	++	++	+	+	116-98	4	126-120			Died 24 hrs.
21 Mrs. B.	++	++	+	++	142-100	7	140-120			Died 2nd DAY.

CHART I

patient entered the hospital. However, under rest and the ice-bag improvement was rapid, so it was deemed a safe case upon which to operate. With this patient we believe that improvement will be slower than usual, but as the disease was only of moderate duration, the prognosis should be an eventual cure. Cases nine, ten and eleven were all patients who had suffered marked severity and of rather long standing. Case fourteen was an unmarried woman of sixty years, in whom the disease was of several years' standing with marked secondary changes. Operation was not advised, but was performed at the solicitation of the patient. Cases fifteen, sixteen and seventeen were all of long standing and marked severity. These might well

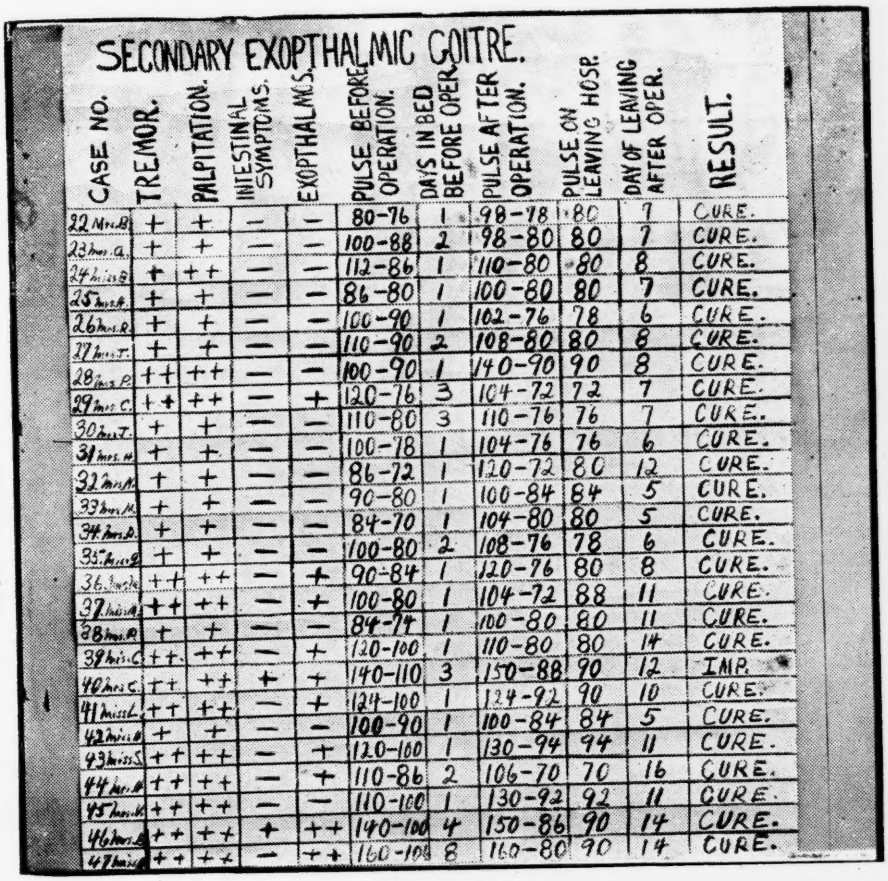
be classed as doubtful cases when considering the advisability of operation. However, all other methods of treatment had been tried during the course of their illness, including Thyroidectine, radium implantation, etc.,—and in each case it was the patient's own desire that operation be performed. Case fifteen bids fair to make a permanent recovery. This operation was performed two years ago and although the patient still complains of slight palpitation at intervals, she has gained twenty pounds in weight, and the attacks of tachycardia are becoming less frequent. Case seventeen was operated at a more recent date but the recovery seems to be progressing quite rapidly. In both of these cases symptoms had been present for a period of ten years. Case sixteen belonged to the same class except that she was much farther advanced in years. This fact tends to make the prognosis of complete recovery more guarded since permanent heart degeneration and eye changes are more apt to be present. However, the patient reports much improvement. Case eighteen presents a very severe grade of acute exophthalmic goitre in a relatively young woman. At the time of entrance into the hospital the patient was delirious and in an extreme state. Rest and the ice-bag caused improvement of symptoms, so that the patient was conscious and the heart in much better condition than at the time of entrance. Operation was urged by relatives and attempted after one week of rest treatment, with death as the result from hyper-thyroidism at the end of two days. This is a case that in all probability would have ended fatally from the disease itself—however, we now believe that the rest treatment should have been continued for a much longer period. Case nineteen represents a woman of advanced years who had been a victim of exophthalmic goitre for over twenty years. All the symptoms of this disease were present to a marked degree. Together with these severe exophthalmic symptoms were present secondary myxodema signs. The legs were swollen, and the skin thick and dry. Operation was not advised but sought by the patient. After the inhalation of about two drachms of ether, respiration ceased, the face and neck became deep blue and death was immediate. The cause was probably a clot located at or between the right auricle and the innominate bifurcation of the superior vena cava. A review of this case teaches that owing to the permanent vascular changes, operation should have been positively refused. Local anæsthesia would possibly have been safer than general narcosis.

Cases twenty and twenty-one represent severe types of exophthalmic goitre in men. While the disease was of severe form in both cases, yet they responded well to the rest treatment and were deemed suitable for operation. Certainly there were several cases amongst those recorded belonging to the opposite sex which were of greater severity, that made uninterrupted recoveries. The conclusion must be that the risk of operation for this disease is greater in the male than in the female.

Next we will consider those cases which belong to the class of Secondary Exophthalmic Goitre. Kocher terms these cases "Struma Gravesiana Colloides."

Cases twenty-two to thirty-eight inclusive are those of mild to fairly severe types of this disease. In two, twenty-nine and thirty-seven, the condition had persisted for several years, and the picture presented was fully as severe as that found in the marked primary cases. However, the risk of operation was considerably less, and the resulting recovery more rapid. Cases thirty-nine to forty-seven were of well-marked exophthalmos and might have been

confused with the primary type were it not for the fact that the history showed the presence of tumor formation in the thyroid from a few months to several years before the occurrence of exophthalmic symptoms. Case forty-seven was one of especially marked tremor, palpitation and exophthalmos as well as tachycardia. However, a favorable prognosis was given



SECONDARY EXOPTHALMIC GOITRE.

CASE NO.	TREMOR.	PALPITATION.	INTESTINAL SYMPTOMS.	EXOPTHALMOS.	PULSE BEFORE OPERATION.	DAYS IN BED BEFORE OPER.	PULSE AFTER OPERATION.	PULSE ON LEAVING HOSP.	DAY OF LEAVING AFTER OPER.	RESULT.
22 Mrs. B.	+	+	—	—	80-76	1	98-78	80	7	CURE.
23 Mrs. A.	+	+	—	—	100-88	2	98-80	80	7	CURE.
24 Miss S.	+	++	—	—	112-86	1	110-80	80	8	CURE.
25 Mrs. A.	+	+	—	—	86-80	1	100-80	80	7	CURE.
26 Mrs. R.	+	+	—	—	100-90	1	102-76	78	6	CURE.
27 Mrs. T.	+	+	—	—	110-90	2	108-80	80	8	CURE.
28 Miss P.	++	++	—	—	100-90	1	140-90	90	8	CURE.
29 Mrs. C.	++	++	—	+	120-76	3	104-72	72	7	CURE.
30 Miss T.	+	+	—	—	110-80	3	110-76	76	7	CURE.
31 Mrs. H.	+	+	—	—	100-78	1	104-76	76	6	CURE.
32 Mrs. R.	+	+	—	—	86-72	1	120-72	80	12	CURE.
33 Mrs. M.	+	+	—	—	90-80	1	100-84	84	5	CURE.
34 Mrs. B.	+	+	—	—	84-70	1	104-80	80	5	CURE.
35 Miss S.	+	+	—	—	100-80	2	108-76	78	6	CURE.
36 Mrs. K.	++	++	—	+	90-84	1	120-76	80	8	CURE.
37 Miss A.	++	++	—	+	100-80	1	104-72	88	11	CURE.
38 Mrs. R.	+	+	—	—	84-74	1	100-80	80	11	CURE.
39 Mrs. C.	++	++	—	+	120-100	1	110-80	80	14	CURE.
40 Mrs. C.	++	++	+	+	140-110	3	150-88	90	12	IMP.
41 Miss L.	++	++	—	+	124-100	1	124-92	90	10	CURE.
42 Miss O.	+	+	—	—	100-90	1	100-84	84	5	CURE.
43 Miss S.	++	++	—	+	120-100	1	130-94	94	11	CURE.
44 Mrs. B.	++	++	—	+	110-86	2	106-70	70	16	CURE.
45 Mrs. K.	++	++	—	—	110-100	1	130-92	92	11	CURE.
46 Mrs. E.	++	++	+	++	140-100	4	150-86	90	14	CURE.
47 Miss [illegible]	++	++	—	++	160-104	8	160-80	90	14	CURE.

CHART II

isthmus. The left lobe also contained a small adenoma which enlarged about six months after the operation and caused a return of the symptoms, though in a milder degree. A year after the first operation, the tumor mass was enucleated from the remaining left lobe and the patient's condition shows much improvement.

It is of interest to note with what rapidity before operation and the improvement following was rapid, because it belonged to the secondary type.

In all cases operated upon in both divisions, removal of one lobe of the gland, or one lobe plus the isthmus, was found to be sufficient with the exception of case forty. This patient possessed a large adenoma of the right lobe which was removed with the

improvement in the various symptoms of this disease follows operative procedure, and a study of the above tabulated cases has caused us to arrive at the following conclusions: In many cases heart palpitation ceases within twenty-four hours after operation, and, as a rule, this is the first symptom to disappear. Within two to four days the intestinal symptoms have

usually subsided or are much improved. Next the tremor gradually disappears, usually being absent at the expiration of one week, although in severe cases a longer time must elapse. Within three to four weeks the entire expression of the patient has changed and the average case will report a gain in weight of from five to ten pounds. One patient, number twelve, the only one in which thyroidectomy was not employed, but the ligation of three arteries instead—reported a gain of fifteen pounds

tirely disappear although some improvement can be looked for.

Of special interest are the alterations in the blood count following operations for this disease. Kocher has called attention to the fact that in all cases of true exophthalmic goitre the relative number of polymorphonuclear leucocytes is greatly reduced, while the percentage of lymphocytes is correspondingly increased, and the resulting blood picture is almost diagnostic of this condition.

DIFFERENTIAL LEUCOCYTE COUNT IN HYPERTHYROIDISM.

CASE-J.A.

DATE	11-29-07	1-2-08	2-10-08	2-14-08	12-23-08
POLY.	40.6	46	OPERATION.	75	68.6
S.MONO.	38	33		19	25
L.MONO.	13.6	19		5	5.6
EOSIN.	6	2		1	0.6
MAST.	1.6				

CHART III

four weeks after operation. Number forty-seven reported a gain of thirty-five pounds within two months. Though this is exceptional, the average successful case should increase in weight slowly after the first rather rapid gain of five or ten pounds until a normal healthy equilibrium is acquired.

Where exophthalmos is marked, this symptom is the last to disappear. Indeed, if it has existed long, previous to operation, so that secondary changes have occurred in the orbital fatty tissue, it will never en-

One might be led to believe that the rapid improvement of nervous symptoms following these operations, is caused by some suggestive element rather than as a direct result of the treatment, were it not for the fact that the blood changes, over which the patient assuredly can have no control, progress with equal rapidity. As an example we might cite case fifteen, in which the percentage of polymorphonuclear cells was forty-six, the small mononuclear thirty-three, the large mononuclear nineteen, and the eosinophile two, before

operation. Four days after, the polymorphonuclear was seventy-five, small mononuclear nineteen, large mononuclear five, and eosinophile one. Ten months later a third examination showed that the percentage of the various blood cells still maintained their normal ratio. Charts of cases five and seventeen show an equally rapid adjustment to the normal of the various blood elements and the subsequent counts taken

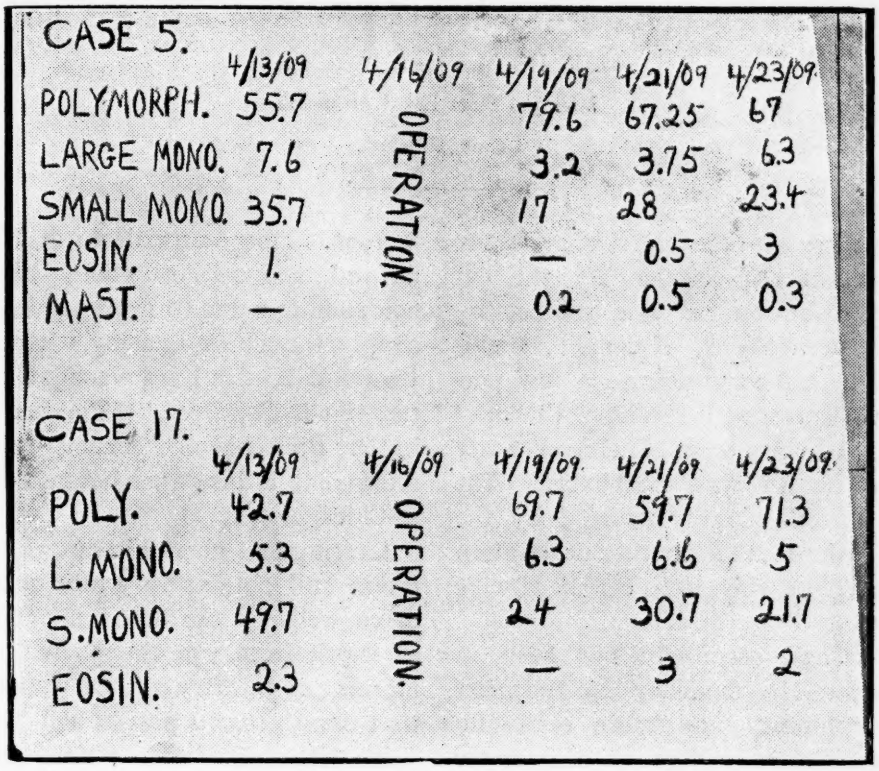


CHART IV

varying periods after operation prove that the first rise is not a leucocytosis from infection or operation, but in reality a readjustment of the percentage of cellular elements. Total counts were made at the same time and showed no increase.

In conclusion we would state, first: That early operation before secondary heart and eye changes have occurred, practically assures a cure to the victim of exophthalmic goitre. If the patient is suffering from severe symptoms at the time of entrance into the hospital, the condition can be much improved by absolute rest and the application of ice to the gland and heart. It should be the object of the surgeon to operate between exacerbations of the disease. This we would term the "interval operation."

Second: No case in which the symptoms have been present for a period of over five years, and in which permanent heart changes and eye changes have occurred, can be promised a positive recovery, although their condition may be much improved. These are the dangerous cases for operation and each must be studied and treated according to the symptoms.

Third: The prognosis in cases of the secondary type is more favorable than in

those of the primary, and the risk of operation is slight.

Since this paper was given before the Society, Case No. 15, Series 1, after three years of apparently perfect health, following removal of the right lobe, returned with a slight recurrence of symptoms. The patient attributed the relapse to severe mental suffering, but examination showed an adenomatous enlargement of the isthmus which extended for two inches below the sternum. This portion of the gland was removed one week ago and is now being followed by a rapid decrease of symptoms.

WINTER CHOLERA

M. L. HOLM, M. D., Bacteriologist
Michigan State Board of Health
Lansing, Michigan

The purpose of this paper is primarily to express an appreciation for the excellent contribution on this subject by Dr O. C. Breitenbach, Escanaba, Michigan, and to call attention to a few personal experiences with "Winter Cholera" since the laboratory of Michigan State Board of Health was established. The subject is so thoroughly covered by the author mentioned, that another description of the cases at this time can hardly be necessary.

There is and seemingly has been in many localities a tendency on the part of the community, and more especially public officials in charge of the water supplies, to endeavor to conceal the true state of conditions when their water supplies become contaminated, and investigations by public laboratories are by no means always satisfactory. In a few instances, public officials have deliberately substituted water samples of known purity when the general supply was contaminated.

In the *Journal A. M. A.*, February 15, 1908, in an editorial entitled "Winter Cholera" is a reference to the epidemic at Lansing, Mich., which occurred January 8, 1908. This editorial states, "The most natural supposition would be that the epidemic was due to impurity in the water supply, though at Lansing, where the State Board of Health has investigated the matter, this is disproved." This was criticised by Dr. Breitenbach, February 18, and later referred to in his paper before the A. M. A. in Chicago.

Lansing is a city of about 30,000 population and obtains its water supply from drive wells of the artesian type, ranging in depth from 250 to 350 feet. On the morning of January 8, '08, it was estimated that about 10,000 people had been taken sick with diarrhea, which cases had apparently begun since the previous day. It was noticed that the greater proportion of cases occurred in the south part of the city. A sample of water, said to be taken at the city pumping station, was examined at the state board laboratory and found entirely safe and free from contamination. This epidemic subsided in a few days except for a few lingering cases. Much speculation necessarily resulted as to the probable cause, some stoutly maintaining that contaminated

water was the cause, others blaming the atmospheric conditions. Investigations revealed a few cases in the surrounding country, but in East Lansing, which has an independent water supply, there was no unusual amount of diarrhea.

On February 22, the epidemic was repeated, but in a somewhat less extensive degree. At this time water samples were collected from the private residences of several families who were attacked, which led to the discovery not only of contamination in considerable degree, but that this contamination increased toward the south part of the city. Through this we gained the information, for the first time, that the city was supplied by two separate stations, pumping independently into the water mains. The one on the south side had been completed the previous year and had been used only occasionally. An examination of the water showed the results given below:

		No. 1	No. 2	No. 3	No. 4
Color		None	None	None	None
Odor		None	None	None	None
Turbidity		None	None	None	None
Sediment		None	None	None	None
Parts per 1,000,000—	N. as Free Amm.	.050	.120	.170	.180
	N. as Alb. Amm.	.020	.040	.040	.040
	N. as Nitrites	.000	.002	.001	.001
	N. as Nitrates	.000	.000	.000	.000
	Chlorine	13.000	11.000	10.000	10.000
	Oxygen consumed	1.200	1.400	1.400	1.400
	Alkalinity	300.000	305.000	305.000	305.000
	Hardness	275.000	250.000	250.000	250.000
	Ignited solids	285.000	270.000	275.000	285.000
	Iron	.600	.600	.600	.600
Colonies per cc at 20°C		2	120	220	400
Colonies per cc at 40°C		0	18	28	32
Red colonies per cc on L. L. A		0	14	21	27
B. Coli in 1 cc sample		No	Yes	Yes	Yes
B Coli in 25 cc sample		No	Yes	Yes	Yes

No. 1. Main pumping station.

No. 2 and No. 3. Water from residences approaching the south side station.

No. 4. South side station.

By order of the Secretary of the State Board of Health, the station in the south part of town was closed and the city supply pipes were well flushed, after which the epidemic again promptly subsided. Since that time Lansing city water has been subjected to numerous examinations and has up to the present time always been found pure and the city has enjoyed an apparent immunity to "Winter Cholera."

This fact becomes significant when we read the following clipping from *The State Republican*, May 5, 1909:

"The 'epidemic' has struck St. Johns. Scarcely a family has escaped and in some every member has been ill at the same time. The first cases were reported the latter part of the week and the number has increased daily since that time.

"Some believe the illness is caused by city water and are taking precautions to boil all that is used. As many are ill in the country as well as in the city it seems that the cause cannot be impure water. Many believe the sudden changes of the weather are to blame.

"Some of the city water was sent to the laboratory of the State Board of Health for analysis. State Bacteriologist M. L. Holm states that he finds the water to be contaminated with sewage and sur-

face water which has run into the reservoirs during the high water of the last few days. Dr. Holm states the impure water is, without doubt, the cause of the epidemic in the city proper."

St. Johns, Michigan, is a city of about 4,000 inhabitants and located about 15 miles north of Lansing. Authoritative investigations indicate that on May 4th, there were between 1,200 and 1,500 cases of diarrhea in the city of St. Johns. The city is supplied from drive wells of the artesian type, ranging in depth from 365 to 575 feet. The water is pumped into a reservoir from which it is distributed. Following is an analysis of a sample of water from the reservoir, taken on May 3rd and one from each of the three wells supplying same, taken on May 5th, 1909:

		Reservoir	Well 1	Well 2	Well 3
Color		None	10	None	None
Odor		None	Faint	None	None
Turbidity		None	None	None	None
Sediment		None	None	None	None
Parts per 1,000,000—	N. as Free Amm	.180	.250	.120	.250
	N. as Alb. Amm	.030	.060	.030	.020
	N. as Nitrites	.010	.025	.002	.000
	N. as Nitrates	.080	.100	.020	.000
	Chlorine	22.000	11.000	10.000	32.000
	Oxygen consumed	1.800	2.500	1.500	1.800
	Alkalinity	280.000	290.000	250.000	300.000
	Hardness	250.000	225.000	200.000	275.000
	Ignited solids	350.000	275.000	245.000	345.000
	Iron	.600	.700	.600	.600
Colonies per cc at 20°C		8,500	1,200	28	None
Colonies per cc at 40°C		72	11	None	None
Red colonies per cc on L. L. A		48	4	None	None
B. Coli in 1 cc sample		Yes	Yes	No	No
B. Coli in 25 cc sample		Yes	Yes	Yes	No

It is worthy of note that the bacterial contamination found in the wells May 5th, is considerably less than was contained in the mixed water from the reservoir on May 3rd, indicating that the contamination was rapidly disappearing. The reservoir is raised above the surface soil so it is safe to exclude contamination at the reservoir except as it is pumped from the wells.

It is not necessary to go into detail as to how these various wells became contaminated. Suffice it to say that in each case the contamination occurred from nearby sewers and the sewage gained access to the water by running in at the top of the well, a possibility which is due to improper precautions; and the remedy is simple.

The cases occurring in the country are easily accounted for. Our records show that out of 309 waters examined for potability, in the laboratory, from the State of Michigan, 186 (60%) were found to be contaminated. Improperly protected wells in the country is the rule. Many of them are curbed with boards, brick or stone, and offer absolutely no protection at times when the soil is highly flooded from rapid thaws and rain, such as occurred at the time of each above mentioned epidemic. At such times, the accumulated filth of months is often washed into the wells and one may sometimes see shallow wells, which ordinarily contained only a few feet of water, filled nearly to the top with surface washings. At such times well waters are not alone to be contaminated, rivers and lakes receive their liberal contributions from stagnant sewers and polluted inland soil. This

is well illustrated by the findings from St. Clair River waters collected at the St. Clair city intake, April 28th, 1909, and again May 4th, 1909, following the same period of snow, hail and rain which led to the epidemic at St. Johns.

No. 1. St. Clair River sample, collected at St. Clair city intake, April 28.

No. 2. St. Clair River sample, collected at St. Clair city intake, May 4.

No. 3. St. Clair River sample, collected May 4th from Canadian Channel across from St. Clair. Given to show the normal water of the mid-river at the time.

No. 4. Grand River sample, collected May 4th, just above Grand Rapids city water works intake, where the same weather conditions prevailed.

		No. 1	No. 2	No. 3	No. 4
Color		None	45	None	75
Odor		None	Musty	None	Musty
Turbidity		5	80	None	60
Sediment		Trace	Consid.	Trace	Consid.
Parts per 1,000,000—	N. as Free Amm	.010	.260	.010	.040
	N. as Alb. Amm	.060	.280	.050	.300
	N. as Nitrites	.001	.005	.001	.003
	N. as Nitrates	.070	.500	.060	1.500
	Chlorine	7.000	7.000	4.000	3.000
	Oxygen consumed	3.500	9.800	1.800	15.800
	Alkalinity	87.000	82.000	85.000	95.000
	Hardness	75.000	90.000	75.000	95.000
	Ignited solids	85.000	150.000	75.000	140.000
	Iron	.400	5.500	.200	2.000
Colonies per cc at 20°C		120	32,500	60	28,000
Colonies per cc at 40°C		9	152	0	60
Red colonies per cc on L. L. A		2	58	0	9
B. Coli in 1 cc sample		Yes	Yes	No	Yes
B. Coli in 25 cc sample		Yes	Yes	No	Yes

These diarrheal epidemics are frequent at St. Clair. That they should occur at Escanaba, Wyandotte and Grand Rapids is not to be wondered at. These are cities whose public water supply is subjected to constant contamination, and together with them we could name a score of others in the State of Michigan. Aside from these, there are few cities whose water supply is not subject to occasional accidental contamination, and at such times, especially when resulting from carelessness, it must indeed be a relief to those on whose shoulders the burden of responsibility falls, to be able to draw the etiologic factors of the resulting disease from the surrounding air and hush up the more intelligent citizens by "You'll hurt the town."

At Michigan City, when the sewage laden creek water was mixed with the public water supply December 21, 1901, there occurred within twenty-four hours a severe epidemic of "Winter Cholera."

In Mankato, Minn., when the sewers overflowed in the spring of '08, nearly one-half of the population using the public water were suddenly taken with diarrhea and during the month which followed there occurred one of the most appalling epidemics of typhoid fever which has been recorded with modern sanitation. The city health officer reports over 500 cases of typhoid fever traceable to the city water supply which was examined at the State Laboratory and found to be contaminated with sewage.

On August 5, '08, there occurred at the Grand Hotel, Mackinac Island, an epidemic of diarrhea among the attendants of "The Annual Convention of the Association of State and National Food

and Dairy Departments" which affected the greater proportion of the members present. The report of the investigating committee shows conclusively that there occurred at that time a contamination of the water supply of the hotel from a nearby sewer and this contamination was given by the committee as the cause of the epidemic. While one may hardly speak of "Winter Cholera" in the early part of August, these cases were evidently the same, etiologically and pathologically, as those previously referred to. Whether or not we are to use the name "Winter Cholera," it would seem decidedly inconsistent to apply to the same disease a different appellation because it occurs in the month of August instead of the month of January.

The history of so called "Winter Cholera," like typhoid fever, in the State of Michigan and the world over is probably the history of contaminated water supplies. That these diseases may be conveyed by other agents is well known. That diarrhea may result from a variety of causes is equally clear. But when one-third of the population of a city is taken sick in a night, and on the next morning what was previoulsy a pure water supply is found to be laden with sewage, it is not necessary to accuse the innocent air. If an honest revelation of facts is going to "hurt the town," it is time for the town to act. We are dealing with remediable conditions and it behooves each locality to find the simplest remedy for their individual conditions and apply it. It is not a disgrace for any city to have had a contaminated water supply if steps have been taken to improve it. But it is hardly comprehensible that intelligent citizens of some cities are willing to go on suffering the horrors and agonies of disease and death, resulting from contaminated water supplies from year to year and yet not make even an effort to improve them.

1. Breitenbach, Dr. O. C., Choleriform Diarrhea of Cold Weather. *Journal A. M. A.*, October 31, 1908.

2. Breitenbach, Dr. O. C., Winter Cholera, *Journal, A. M. A.*, February 29, 1908.

3. Inches, Dr. J. W., A Report of an Investigation made by the State Board of Health of the Water of the St. Clair River, St. Clair, Mich., 1908.

4. Annual Report of Indiana State Board of Health, 1901–2.

5. Robison, Prof. F. W., Report of Investigating Committee on Poisoning at Mackinac. *The American Food Journal*, Nov. 15, 1908.

6. Bjelland, Dr. A. O., Annual Reports of the City of Mankato, Minnesota, 1908.

SURGICAL SUGGESTIONS

Ligation of the cystic artery at the beginning of a cholecystectomy often makes the removal of the gall-bladder a bloodless procedure.

A short drainage tube, and its early postoperative removal, are perhaps the best safeguards against the formation of an empyema sinus.

Colon irrigation, after the method of gastric lavage, is sometimes effectual when the most actively compounded enemata arenot.

Unilateral deafness without known cause, associated with facial palsy on the same side, should suggest a lesion in the posterior cerebral fossa.—*American Journal of Surgery.*

DIRECT TRANSFUSION*

WILLIAM E. McNAMARA, M. D.

Trimountain, Michigan

From an historical point of view the study of Transfusion of Blood is a very interesting one, for even as far back as what we are pleased to call the "Dawn of History" we may find accounts of transfusion of blood from one human being to another. According to La Mattiniere is to be seen in the history of the ancient Egyptians that these people practiced transfusion for the healing of their princess. A translation on an ancient Jewish writing of this period contains the following: "Naam, Prince of the army of Ben'Adad, King of Syria, being attacked with leprosy, resorted to physicians who, in order to cure him, withdrew blood from his veins and replaced it with other blood." At a much later day, Labivius, in his treatise upon the sacrifices of the Emperor Julian, speaks of transfusion, as having been an eye witness of an operation of this sort. And later, the instance of Pope Pius III, in which the Pope was bled, his blood being replaced by blood drawn from two young men, his blood in turn being used to replace theirs. In this instance, it is interesting to note that all three died, the outcome in most of the other cases not being mentioned. Gesellius collected about a hundred references from the older literature, i. e., up to 1803, and 169 references from that date to the year 1872. The two or three decades following would doubtless show a still larger number of papers bearing upon this subject.

Landois in 1875 collected 347 cases of transfusion of human blood, of which in 150 cases the result was favorable, in 180 unfavorable, doubtful in 12, while in 3 no result was to be expected, and 2 died during the course of the operation. He also collected 129 cases of transfusion of animal blood into the human being, of which 42 resulted in a cure or continued improvement, in 25 cases transitory improvement and doubtful success were noted, and 62 operations were followed by no improvement and death. Statistics at these times, i. e., before anything was known of sepsis, of bacteriology or of the processes of the coagulation of the blood, etc., are certainly of no value and many if not most of them owe their apparent innocuousness from the exceedingly small dose of blood transfused or from its being injected into the body tissues instead of directly into the circulation; as witness, note the large proportion of reported improved or cured cases following transfusion of blood from some lower animal, an operation in which in the light of our present knowledge we should confidentially look forward to rapid dissolution and death from hemolysis.

Discussion pro and con and speculations as to the immediate and remote effect of this operation, i. e., as to whether transfusion of lamb's blood would give the recipient a lamblike character or would even cause him to grow wool and horns, indulged in at this time might be as interesting reading, I think, as the modern "Jessie James' Own Book," and were doubtless quite as bloody. However, no great stride in human knowledge was ever made that did not represent great sacrifices and often many lives in the making.

And out of all these experiments and operations undertaken in all good faith

*Paper read before the "Upper Peninsula Medical Society" meeting at Calumet, Mich., Aug. 3, 1909.

at that time, has come our present knowledge of the practical medico-legal determination of blood by biological test, of our present more or less complete studies on immunity and its most recent refinement in the determination of the state of infection by means of the Opsonic Index.

Studying these results and others of more recent time we have learned one most important fact, i. e., that the blood of each and every species of the animal kingdom is peculiar; the blood of two species cannot be mixed, because agglutination and dissolution of the corpuscles always result, e. g., the corpuscles of the sheep are dissolved by human serum in from 3 to 6 minutes, human corpuscles are immediately agglutinated by the serum of sheep's blood and begin to dissolve after 7 hours. Transfusion from one species to another would be an unpardonable error, and as in certain conditions agglutination will take place between individuals of the same species, it doubtless will be found that indiscriminate transfusion will, as our knowledge grows, be considered quite as unpardonable an error. However, with certain recent refinements in technique and in view of our more recent studies of the pathology of the blood, it seems to me that there will be found conditions in which direct transfusion will be adjudged the proper procedure and in certain of these, the only operation that can be done tc preserve the patient's life. And the saving of life is the end in medicine.

Since the development of modern aseptic methods of operating many bright minds in all parts of the civilized world have been busy trying to devise some method of uniting the ends of a severed artery or vein that would be ideal and applicable in all cases, and while the ideal has probably not yet been attained, several methods have been perfected, which, I think, may be divided into three classes:

(1) The invagination.

(2) End to end suture.

(3) The joining together of the cut ends with the aid of some mechanical prosthesis.

As concrete examples of these (3) classes we may mention "Murphy's Method of Invagination," in which the proximal end of the artery is invaginated into the distal end by means of three (3) "U" shaped sutures. This method, because of the shortening of the vessel which it necessitates is applicable only in a few locations, as the popliteal space, Scarpa's triangle and the axillary space, where the shortening can be compensated, before the time, by position, and has the further disadvantage that the distal end of the cut artery contracts and narrows the lumen. However, several successful clinical cases have been reported.

(2) Of the end to end suture methods, probably the best is that of Carrel, published in 1902. The main feature brought out in this is the three traction sutures of fine silk laid at equidistant points on the circumference of the cut ends of the vessel or vessels.

Traction upon these sutures approximates the edge of the vessel and renders the application of a continuous suture comparatively easy. At least easy in the hands of those men who have become skilled in this line of work.

In the hands of Carrel this method has become perfected to a remarkable degree, enabling him to transplant entire organs successfully, in his laboratory experimentations, and as before, many brilliant clinical results have been obtained by this method. However, I think the feeling that most of us would have in trying to use this method would be comparable to those of the blacksmith who was endeavoring to weld the hairspring of his watch at his forge. It's delicate work!

(3) The third class, that of using mechanical prostheses, was presumably first done by Payr in 1900, who used a small cylinder of magnesium over which the proximal end of the artery was reflected and tied and over this the distal end was drawn and tied, thus bringing intima to intima, with no narrowing of the lumen and no foreign body exposed to the blood stream. This would seem an ideal method inasmuch as the magnesium is gradually absorbed in the same way that our animal sutures are; but for various reasons it has not found much favor with the workers in this field. However, this idea has been made use of by Dr. Crile and others in perfecting a method for direct transfusion from one animal or patient to another. It has been found to be the most successful in this work. Dr. Crile had some small metal canulas made after the manner of Payr's magnesium prostheses but with the addition of a small handle by which they can be more easily manipulated and with these has perfected a technique by means of which any ordinary practitioner may complete an anastomosis of an artery of one of his patients with the vein of another and accomplish a direct transfusion.

Dr. Crile's technique published in the *Annals of Surgery*, September number, 1907, in brief is as follows: "In the clinical transfusion we have utilized the radial artery of the donor and the proximal end of any superficial vein of the arm of the recipient. The radial artery was chosen because it is easily isolated and may be readily adjusted to the position of the vein of the recipient and on account of the very free anastomosis between the radial and ulnar, the destruction of the radial causes no inconvenience to the donor. Unless contraindicated the donor and recipient are each given a hypodermic of morphine twenty minutes before the transfusion."

This not only quiets the patient but also, I think, tends to prevent undue contraction of the vessels as soon as they are exposed. "Before they enter the operating room, their arms are prepared and their eyes covered with a wet towel, the donor is placed upon an operating table of the Trendleberg type so that, should he faint, the head may be readily lowered. The recipient is also placed upon an operating table with his head in the opposite direction from that of the donor. By the use of infiltration anæsthesia of 0.1% solution of cocaine about 3 centimeters of the radial of the donor is exposed, the smaller branches tied with very fine silk, a 'Crile' clamp is applied to the proximal end and the distal end is ligated, the artery is then divided, the adventitia is pulled over the free end as far as possible and snipped off, a moist saline sponge now covers the field.

"Three or four centimeters of a superficial vein of the recipient is prepared in exactly the same manner; the vessels are then examined and a cannula whose bore is larger than the actual tissue thickness of either is selected; the vein pushed through and turned back as a cuff and tied in the second groove; and the end of the artery drawn over this and tied in the first groove. The clamp is then removed from the vein and gradually from the artery when the blood stream may be palpated in the vein of the recipient. As little and as gentle manipulation as is possible must be done and the field must be kept covered with warm saline as the artery tends to contract and narrow its lumen on exposure."

The above outlined technique is really very simple and any one of us could do the operation with almost no assistance in a few minutes if occasion should arise in emergency.

My attention was first called to the

subject by hearing Dr. Crile read his report of a series of clinical cases at Atlantic City three years ago, afterwards published in the *Journal A. M. A.* I procured the tubes and with the assistance of Dr. Howlett repeated some of his experiments upon dogs in the winter of 1907-08, and in October, 1908, I performed the operation upon a typhoid patient. Thinking that some of you have probably not followed the published articles along this line, I will relate some of these experiments and clinical results in brief.

Referring to the experiments on dogs, I will relate one only that we did, which Dr. Crile has done something over 200 times upon dogs, with results uniform with our own single case. I produced two medium sized dogs, anæsthetized them and then dissected out about two inches of the carotid artery of one and about the same of the external jugular vein of the other and joined this artery and vein as in above mentioned technique, leaving the clamps closed. We then opened the femoral artery of the dog destined to be recipient in the experiment and allowed that to bleed until the blood could no longer be made to flow, i. e., until the circulation in that dog as such, had ceased to exist. At this time the respiration in this animal had stopped entirely for at least two or three minutes and we could no longer detect any movement of the heart through the chest walls. We now tied the femoral and opened the clamps on the jugular vein and on the carotid artery of the donor and blood began to flow from dog No. 2 into the vein of dog No. 1 We then began artificial respiration and massage of the heart in dog No. 2 as best we could and in a few minutes the heart began to beat again and natural respiration was resumed. The mucous membranes of the eyelids and mouth which had become a ghastly white began to show pink and the dog to show signs of life, necessitating more anæsthetic, which had been stopped several minutes. We allowed the transfusion to go on 12 minutes when dog No. 2, the donor, began to show signs of collapse and the transfusion was stopped, the vessels tied, wounds closed and the dogs carried back to the kennel. The next morning the dog that had received the transfusion was up and looking for food, the other not able to walk alone but recovered his activity in about five days, when both appeared perfectly normal.

This experiment having been repeated scores of times with uniform results, as above stated, definitely proves that the blood of one normal animal may be transfused into the vessels of another normal animal of the same species and there functionate quite as the original blood had done, without hemolytic change and without change in the body tissues of the animal receiving said blood. Observations upon the urine and repeated blood count have been made which definitely prove the above statement. These we did not repeat. A large number of like experiments having been done on animals with uniform results, Dr. Crile and his associates determined to try the operations upon the human animal when opportunity presented itself after all other known means had been exhausted without benefit, and found that, given like conditions, exactly paralell results would be obtained in the human as in the lower animals.

This of course, opened a wide field for speculation. How far could we go? Could we pour into a man two or three quarts of normal blood who was dying from acute or pathological hemorrhage, the anæmias, purpuras, hemophilia, and make him well; or in acute disease could we thus tide over a patient dying of pneumonia, scarlet fever, or typhoid; or could we instil the necessary vigor to just overcome the down-

ward dip of the balance in consumption?

If you will bear with me a few minutes longer, I will endeavor to show as best I can a few of the conditions that seem to promise some measure of success for this procedure. Naturally the first to suggest itself will be acute hemorrhage. Now, you are thinking of what you have been taught; of the opinion expressed by Goltz some thirty years ago that "death in acute hemorrhage is not due to the fact that the organism had lost the cellular elements of the blood which are needed for the life metabolism of the tissues, but to the impairment of the mechanics of the circulation due to the loss of fluid, and advised that an infusion of physiological salt solution would save life quite as well as infusion of normal blood if that were possible." This has been the accepted idea from that time until very recently. Lately, Mandal, Feiss, Schram, Landois, Von Seimsem, working in different parts of the world, have proven that salines will not save life in fatal loss of blood.

Physiologists tell us that a patient can lose three per cent of the body weight of blood without fatal results. Experimentors tell us that a loss of blood of between $4\frac{1}{2}$ and $5\frac{1}{2}$ per cent of the body weight is uniformally fatal in the dog, and that in these cases, intravenous transfusion of salines will afford a temporary relief but that the dog will invariably die after a certain number of hours. And the administration of the normal sera, such as physiological salt solution, Locke & Ringers' solutions, have an additional shortcoming that has not been generally understood and that is that these solutions beyond a certain amount will not remain in the blood vessels. In excessive dosage these solutions accumulate in the gastrointestinal tract, the lungs, spleen, and many other parts of the body, constituting in itself a menace to life.

The use of these solutions is exceedingly valuable, but there is a limit to their usefulness. An effective method is that this class of cases must supply more isotonic blood.

Now, my point is that, given a case of presumably fatal hemorrhage whether it be a mine accident, obstetrical case or uncontrolled epistaxis, after we have tried the usual treatments and stimulants, bandaging of the limbs and compression of the abdomen, posture, dependent portions of the body elevated, etc., and a reasonable amount of intravenous saline without continued improvement, we ought to be prepared to do a direct transfusion and almost, I think, with the assurance that this will turn the tide and our patient be saved.

Another class of cases which promises much and in which success has been obtained is in the pathological hemorrhages, hemophilia, typhoid or other hemorrhages from the gastrointestinal tract, purpura hemorrhagica, hemorrhage in the jaundiced gall bladder following operation for stones, etc., hematuria and perhaps in some others. In quite a number of clinical cases of this class the transfusion has proven positive in improving the patient's immediate condition, and in most instances wholly controlled the hemorrhage itself.

As an example of one of these, I will repeat the words of Dr. Crile in reporting a case of chronic hemorrhage from the bowels. *Journal A. M. A.*, Vol. XLVII, No. 18.

"The case was that of a woman who had been bleeding from the bowels for four months, and during that time had been under medical treatment. Her secondary anæmia was extreme; the hemoglobin was approximately 12 per cent, red cells 1,200,000. She was in such a low state that it was not deemed safe even to anæsthetize and was brought in for the purpose of making a transfusion. The transformation in this case

was extraordinary. The lemon yellow color was replaced by white, then by pink, the lips became red, the blood count was more than doubled and the hemoglobin trebled. She felt invigorated and stimulated. All other treatment was withdrawn and her hemorrhage ceased; three weeks later a little blood was found in the stools. She was then anæsthetized and thoroughly examined, when it was found there was a marked varicosity in the rectum with some small ulcers. These were sutured over and the patient left the hospital at the end of six weeks with a red blood count of 4,000,000 and hemoglobin of 70 per cent. Before the transfusion she had no appetite and could scarcely be made to take nourishment. Directly after transfusion she had a vigorous appetite and gained rapidly in health and strength. Her red cells rose to 2,500,000 (more than double) and hemoglobin to 40 per cent. We have complete tables of observations in each case on the red blood count, the hemoglobin and the blood pressure of both donor and donee, extending over a period. The donor in every instance regained the blood lost in from five to seven days. The donee showed neither nephritis nor hemoglobinuria, no lacking of blood, and no evidence that the new blood had in any way affected the donee, nor that the donee had unfavorably affected the newly transfused blood. In other words, the conclusions reached in the laboratory were wholly realized in the clinic.

"The transformation in these cases has been unequalled in my surgical experience, except in the relief from asphyxia by intubation."

The immediate result in several other cases, including hemorrhage in typhoid and other like conditions was quite parallel with the above cited case, but in some instances the hemorrhage recurred after a time, and Dr. Crile advises that where it is possible to do so, an operation to secure the bleeding point ought to be done immediately after the transfusion while the patient is in condition to withstand the shock incident to the operation.

Another case in which transfusion seems theoretically the most rational treatment, but of which no clinical cases have been reported, so far as I know, is in illuminating gas poisoning, Here the main toxic factor is carbonmonoxide which constitutes 6 to 10 per cent of illuminating gas. It occurs in the so-called "Water Gas" to the extent of 30 or 40 per cent and is an important toxic constituent of the "after damp" of mines, and of the gas from coal stoves and blast furnaces. Its affinity for hemoglobin is 300 times that of oxygen. And it is for this reason that these patients die despite treatment by inhaling of oxygen, etc., and theoretically at least, they ought to be saved by being first bled and then supplied with uncombined hemoglobin by transfusion. This has been found to work out exactly according to theory in every instance in the laboratory, dogs being used for the experiment. This, I think, we ought to bear in mind and if occasion arises, to try the effect of a transfusion before we allow the patient to die, if it is possible so to do.

Another field which promises much, and in which some work has been done is in the so-called self-limited diseases, typhoid, pneumonia, scarlet fever, etc. In these diseases, we know that the patient does not get well simply because of the medical treatment that he receives nor because the disease organism has exhausted all of the available material upon which to grow, but on account of the fact that certain immune or protective bodies are built up in the serum of the patient, by the patient, which neutralize the poisons thrown off by the disease germ, and cause that patient to become unsuitable

media for the further development of this particular disease germ. Now, why is it not reasonable to suppose that, given a patient dying of pneumonia, if we could bleed that patient to as great a degree as seemed safe and immediately replace that blood from another patient who had recently recovered from the same infection and was presumably charged with those antibodies, that we would save that patient.

Some work has been done along this line which seems to prove that this theory is well founded.

Referring to my own case, I will only make brief mention of the essential facts as they appeared to us, as there were no blood counts made and no blood pressure observations taken and therefore the report of this case has no scientific value whatever.

The patient was a man about 38 years of age, Norwegian, ill of typhoid fever which had run a relatively high temperature during its whole course, and in the third week had developed a pneumonia with consolidation of the right lower lobe. During the fifth week he began to have numerous large bloody stools and also had three distinct hemorrhages from the lung, a relatively rare accompaniment of typhoid with any complication; in two of these hemoptises there was at least a teacupful of blood coughed up. And following the last hemoptysis the patient passed into a semi-comatose condition, could be roused for a moment with great difficulty, breathing stertorous, temperature between 96 and 97, skin cold and clammy, pulse at wrist could not be counted but by stethoscope heart was counted above 160 per minute, weak but regular. The usual treatment, including intravenous salines, had been given with no improvement. It appeared that the man had surely only a few hours at most to live and I determined to try Dr. Crile's method of direct transfusion, believing that it could at least do no harm and in the light of Dr. Crile's reported results in like conditions, might cause the hemorrhages to cease and tide the patient over this critical stage.

I found a willing donor in the wife, a large, fleshy woman who had never had typhoid. It seemed as though she might be able to furnish as large a quantity of normal blood as we would wish, but really she was not a favorable subject on account of having such a large, fat arm and an exceedingly small radial, due, it seemed, to its having given off its digital branch high up in the arm instead of at the wrist. However, we dissected out about two inches of it under Schlich's infiltration anæsthesia and about two inches of one of the superficial veins of the arm of the man and were able finally to complete the anastomosis, using the smallest tube in the "Crile" set and were rewarded by being able to feel the pulse of the donor in the vein of the man. The man, by the way, did not require any cocaine. He made no movement to withdraw his arm and did not seem to feel the dissection. After the transfusion had been going on several minutes he awoke from his stupor, looked around and asked what the fuss was all about anyway.

In the effort to get the small artery over the cannula we had, I presume, caused some traumatism to the intima and at the end of about twelve minutes pulsation in the vein of the donee had ceased, due to clotting in the artery at the site of the anastomosis. And the vessels were tied and the wounds closed. The man was now fully conscious, talked well, said that he felt much better and was now going to get well. Radial pulse could now be easily counted about 150, quality greatly improved. This improvement in the patient continued several days, although the temperature again rose and remained about 102. But he died on the eighth day follow-

ing the transfusion, apparently from intense toxemia. Hemorrhage from the lung and bowels did not recur.

Judging from results, I should have to conclude that the operation was justified in that the immediate condition of the patient was greatly improved, hemorrhages were controlled and that I should advise the procedure under like conditions again with this additional proviso: that is, I should secure for donor a subject who had recently recovered from typhoid fever if that were possible.

Now gentlemen, in closing, I beg of you that you will not think that I am treating this subject lightly, that I am advocating direct transfusion in all the "ills that human flesh is heir to" but rather that it is a procedure that gives some promise of success, in certain conditions, and given those conditions, we are justified in trying this means, as a last resort, if you will, rather than that of allowing our patient to die without having given him the benefit of the trial.

REMARKS UPON SOME PHASES OF CHRONIC DISEASE OF THE STOMACH, DUODENUM, GALL BLADDER AND APPENDIX*

W. T. DODGE, M. D., Surgeon to Mercy Hospital
Big Rapids, Michigan

The thing that most impressed me during my visit to the great clinic at Rochester, Minn., was the number of cases each day that were marked upon the operative list as "exploration, duodenum, gall bladder, appendix," meaning that the disease for which the abdomen was to be opened could not, with all their resources, be more definitely located. I had previously in a small way discovered from personal experience that one of these organs was diseased when I had made a positive indictment against one of the others, but had until my visit to the "Mayos" always held the opinion that the mistakes were due to lack of diagnostic skill upon my part. When it is reflected that the Mayo staff consists of highly experienced and competent men and that every patient passing through their offices is subjected to a general examination of all his organs, no matter what his symptoms may be, we must admit that conditions they find it impossible to differentiate in so large a number of cases must possess many features in common.

*Read at the meeting of the Montcalm County Medical Society, January 20, 1910.

Chronic ulcer of the stomach or duodenum, cancer of the stomach, gall stones, infection of the gall bladder and chronic appendicitis are the affections which are most likely to be mistaken one for the other. If all the methods of diagnosis available are made use of it would be difficult to avoid recognizing an advanced case of cancer of the stomach, but occasionally if reliance is placed upon symptomatology alone, mistakes will be made in these cases also.

In early cancer it is often impossible to distinguish between that and chronic ulcer which has usually preceded it. The characteristic symptoms of ulcer of the stomach or duodenum are periodicity of attacks of pain, or burning distress, gas eructations or vomiting of sour substances. These attacks come on soon after eating in gastric ulcer and several hours afterwards in duodenal ulcer. In both cases relief follows immediately upon taking food. These attacks may last a few days or several weeks to be followed by varying periods of entire relief. All of you will recog-

nize the above picture as applying as well to many cases of gall stone attacks, although there is less likely to be sour eructations in gall stones and relief is not generally obtained by taking food. Many cases, however, of gall stones are attended with but little pain and have more or less constant stomach distress.

Chronic appendicitis is ordinarily attended with pain and soreness in the right iliac region, often aggravated by taking food, but many cases have no such symptoms, all their distress being referred to the epigastric region. This is due to the fact that chronic irritation of the appendix is often the cause of pyloric spasm. The spasm is induced by partaking of food and is often so severe as to interfere with the proper nutrition of the patient. It is now pretty well established that a diseased appendix should be removed, but it is not so well known that many of our cases of so-called indigestion are due to disease in that organ, in the gall bladder or to gastric or duodenal ulcer. The average period after beginning symptoms at which cases of gastric or duodenal ulcer come to the operating table is twelve and one-half years according to Mayo. During this time most of them have been going from one physician to another, with occasional flittings to eminent gastro-enterologists, seeking relief. They have been fed with pepsin and acids. They have been told in one place that their peptic glands had lost their secreting power. At the specialists, that their stomach had dropped several inches below the normal position and then they are harnessed up with a high-priced abdominal supporter of the specialist's own invention, perhaps given a few pounds of magnesia in divided doses and sent on their way.

Each man consulted gains the reputation for a time of effecting a cure until the regular advent of another periodical attack reduces the patient to despair.

In my experience periodical attacks of indigestion do not often occur in patients who have no organic disease of the stomach, duodenum, gall bladder or appendix. The profession should recognize the fact that symptoms of this kind occurring periodically indicate a condition demanding surgical intervention.

It is not very important to the patient to have an exact diagnosis made. It is important that he should be cured. All modern diagnostic methods should be made use of, but when all is done that can be done along this line many cases will still be found at the operation to have disease in the one of these organs least suspected. This fact is not a serious matter. Cure can be effected in none of them without operation and our death rate will be materially lowered when all of these cases are brought to operation at a much earlier average period in this disease than they are at present. I will report briefly the history of two cases, both illustrating in a marked degree the transference of symptoms and consequent mistakes in diagnosis.

Mrs. F., aged sixty-five, had always been in good health until May, 1909, when she began having distress in her stomach after meals. She visited me once at that time and I gave her some medication for indigestion, asking her to come back for a regular stomach examination and analysis of stomach contents. She did not come back and took her own and her neighbors remedies during the summer without getting relief, when she went to one of our large college clinics. There she had many examinations made and the Director of the clinic wrote me when she came back that he was unable to make a diagnosis but had found that she did very well so long as she took only liquid nourishment and advised that it be continued for some time. The gastric juice contained no hydrochloric acid, some lactic acid,

a little pus, but no blood. I found her much emaciated and taking only half a pint of liquid food in twenty-four hours. I had her increase the amount of food until she was taking a quart in twenty-four hours. She then developed fever, vomiting and complete loss of appetite. She had never had pain at any time during her illness but had constantly vomited her food after several hours of distress following eating. After she recovered from the acute attack of fever I gave her one evening a little solid food and sixteen raisins. The next morning I recovered the skins of twelve raisins, much of the solid food and the washings contained a good deal of pus. I then felt justified in diagnosing obstruction of the pyloris with strong probability of cancer. I operated November 26th and found a perfectly normal stomach—by invaginating the duodenal wall I could put my thumb through the pyloris and the stomach presented no evidence of disease whatever.

I then examined the gall bladder and found a large stone measuring ¾ of an inch in diameter which I removed. The gall bladder contained thickened foul smelling bile which upon culture produced luxuriant growth of colon bacilli. Drainage of the gall bladder was established and the patient made a fine convalescence, a few days after the operation eating solid food with pleasure. In fact, it was at once noticeable that solid food agreed with her better than liquids. It should be noted in this case that while there was a gall stone present yet the real cause of her symptoms was the infected gall bladder. The same condition might be produced by colon infection of the gall bladder without the presence of a stone.

Mr. G., aged sixty, had suffered for ten years from periodical attacks of severe pain in the epigastric region radiating toward the right lower border of the ribs. I have prescribed for him many times during these attacks which came several times a year at varying intervals. He usually required large doses of morphine to relieve the pain and the attacks seldom continued for more than one or two days. All the physicians who saw him during the attacks diagnosed gall stones. His stomach symptoms were never severe and were only present during the attacks of pain. Many times I recommended operation to him but with relief from pain ever came the hope that he would not have another, until last November when after six months of good health during which time he did hard farm work he was taken with severe pain and vomiting. I saw him several times during three weeks that he was in continual pain except when under the influence of opiates. His stomach was irritable and he was mildly jaundiced. I entertained no doubt that he had gall stones and made no special stomach examination. No tumor could be palpated. He finally consented to operation and upon opening his abdomen I found the gall bladder normal and the stomach the seat of cancerous degeneration. The entire organ was involved from the pylorus to the œsophegus. The liver was modular and enlarged and the mesenteric glands were extensively involved. I closed the incision, using linen mattress sutures in the facia and got him out of bed on the following day. He made a good recovery and strange to say has been much better since, having but little pain and retaining nourishment very well. This improvement is due to the mental impression as he has not been informed of his condition and thinks that he ought to recover.

THE CLINICAL IMPORTANCE OF BLOOD PRESSURE OBSERVATIONS*

BENJAMIN A. SHEPARD, M. D.

Plainwell, Michigan

The only way in which the blood can fulfill its function is by continuous movement and it is with some of the phenomena which occur in connection with this continual movement that this paper has to deal. We have not the time to go into the comparative physiology of the circulatory apparatus but we must emphasize the fact that the heart is only a muscular portion of the apparatus, being an important but not the only factor in keeping the blood in motion, the remaining work being performed by the blood vessels and their surrounding tissues, while in some of the lower forms of life the whole of the expulsive and propulsive power is contained in the vessels without any heart. At each contraction of the ventricles a quantity of blood varying greatly under the various conditions is forced into the already full aorta and in connection with this I would emphasize the fact that while we all realize that the arterial walls possess a certain amount of elasticity not all realize its extent nor its importance. Able observers have found that the carotid of the dog could withstand twenty times the normal pressure without tearing. To quote Janeway: "The elastic arterial wall is a mechanical device of great importance. In it during systole a large part of the energy of the ventricles is made potential to be utilized in moving the blood during diastole, thus converting an intermittent into a continuous propelling force, and distributing the heart's work over more than twice the time of its actual muscular contraction." Were the arteries rigid and non-expansile the blood flow would be intermittent—the same amount of blood would go through the capillaries into the veins as entered the aorta and the systolic interim would be without pressure. Upon this continual blood flow depends the proper functionating of the various organs of the body.

At the center of the circulatory apparatus is the heart, receiving the blood from the veins and redistributing it to the various parts of the body with great force and at regular intervals, and yet within the normal elastic arteries this intermittent and forceful output is transformed into a continuous and steady stream so that the ecomomy by means of the great arteries which are continually branching until the capillary system is reached, is supplied with an even flow of blood supplying the tissues with nutriment and oxygen and carrying away the waste products, also regulating secretion and excretion; an important example of the latter being the kidney, where elimination is regulated almost exclusively by the blood flow. It is important that since liquids are almost incompressible we recognize in the arteries something more than a mere set of conducting tubes, and see the various pathological possibilities and lend our efforts to maintaining within the system an equilibrium or proper ratio between the elasticity and the *vis a tergo*.

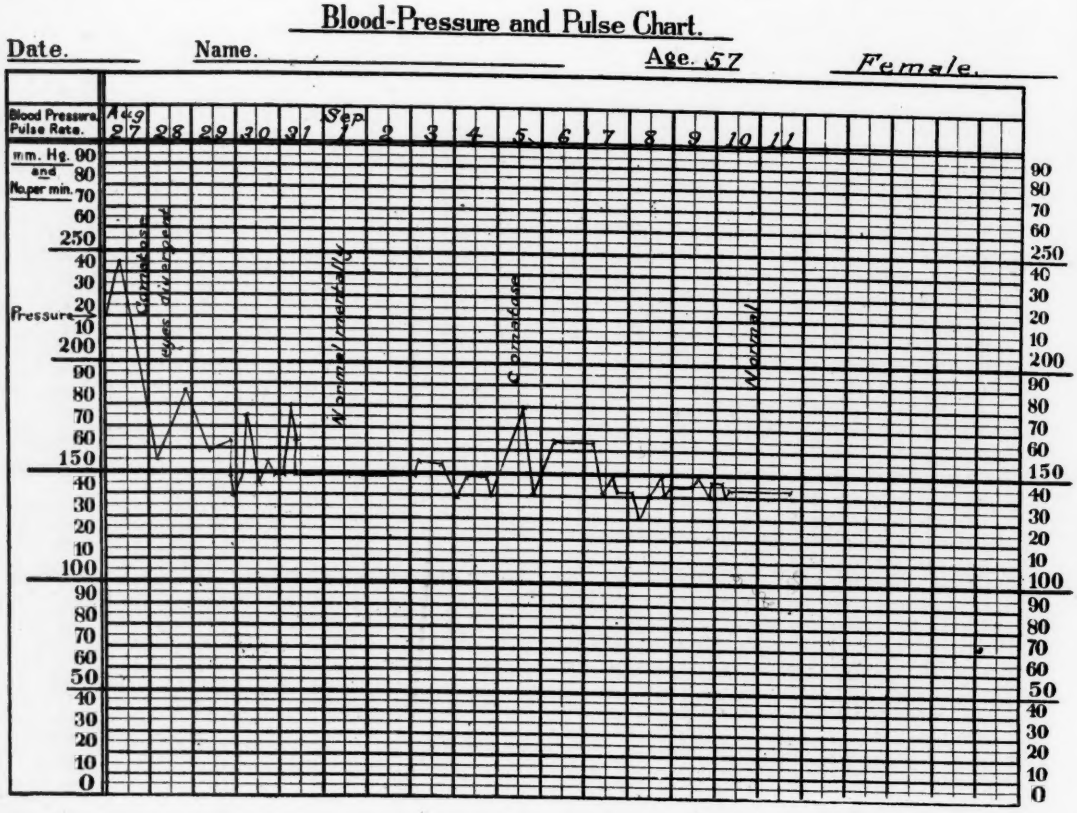
The causes of blood pressure are those which confine the blood within certain bounds and the force which is required to keep it in motion, together, of course, with the ratio of the amount of blood to the confining surface. The heart is the

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primary source of that energy, the sum and total of which makes up the blood pressure; but while it is the primary source we are tempted to estimate its importance too much to the exclusion of other elements. Changes in the volume and velocity of the output tend to alter the pressure and on the other hand if the pressure is increased the pulse rate is lowered probably through the effect on the vagus center since this effect is not

of abdominal pressure raises the arterial tension, but beyond this point pressure causes a fall in tension because of compression of the veins, lessening the amount of blood received by the heart and consequently a lessened output.

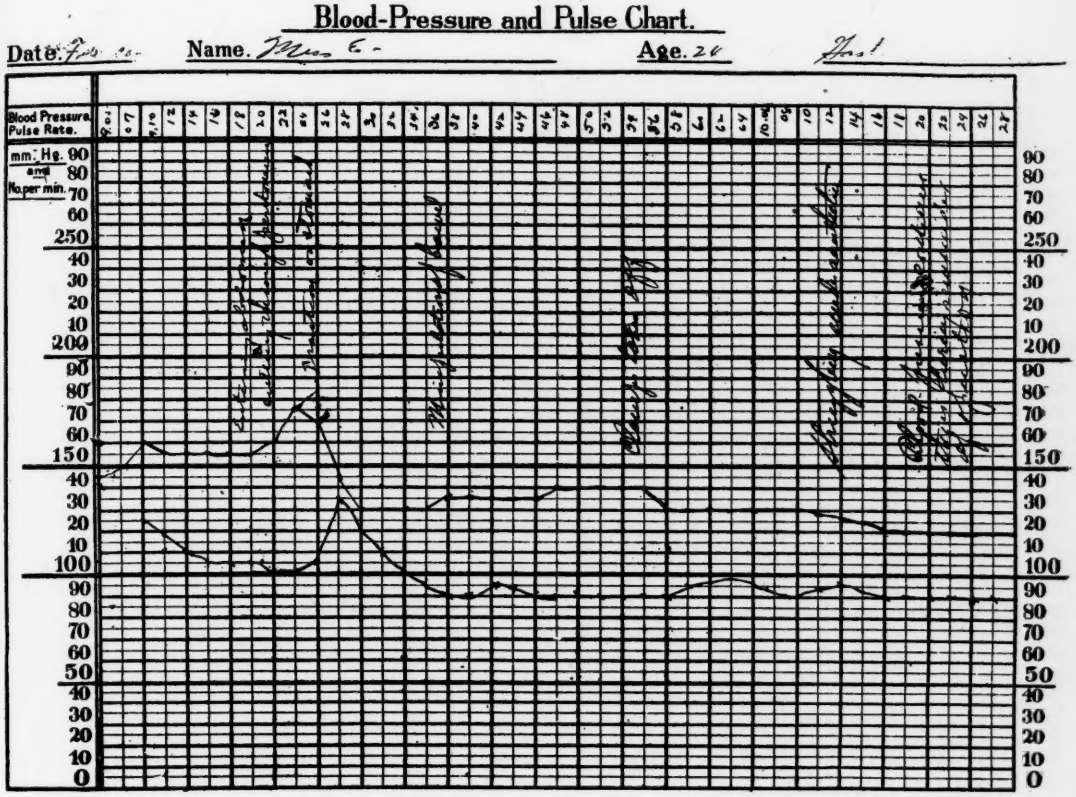
Every blood vessel which has muscle fibre, except in the brain, possesses a tonus which is governed by the vaso-motor nervous system and dilates or contracts the lumen of the vessel, increasing or



usually produced if the vagus is divided; thus if the heart is sluggishly filled, the force with which it is expelled is also markedly lessened, and of great clinical importance in this respect is the work of such men as Quirin of Germany and Crile of this country, who have done much excellent work along this line as well as other lines of research. They have found that up to a certain point the increasing

decreasing the peripheral resistance. Normally a balance is evenly maintained so that a compensated condition is maintained between the contents and container, but, as I shall emphasize later, if this compensation is broken the blood vessels of the brain being without vaso-motor nerves that organ is in the greatest danger either from hemorrhage if the pressure is high or if low from edema from the sluggish

stream. The vaso-motor tone in the various vascular organs, the kidney excepted, varies constantly with the needs of the organ, keeping a balance between the supply and demand, and an excessive demand in one part must be to a certain extent compensated for in another part, though by the vascular dilatation less force is lost from peripheral resistance and is simply a change in blood distribution which may occur without change in pressure. In the kidney, on the contrary, the blood vessels dilate and contract according to the poisons contained in the blood to maintain the blood flow necessary for elimination, and if from arterial changes, as we shall mention later, increased pressure is necessary to maintain the required blood flow to produce the excretion of urine in quantity sufficient to keep the body clear, we can see how serious damage may be done in one part—usually the brain—while nature is trying to compensate for an injured mechanism by excessive pressure which she brings in such cases. Along with peripheral resistance as a factor in blood pressure we must consider the viscosity of the blood as it is by reducing this that we accomplish results by the use of potassium iodide, and though the blood vessels are probably not structurally changed yet because of the lessened viscosity the blood circulates with less resistance and the pressure is lowered.



A point that we must well consider to successfully handle certain cases is the great disproportion between the blood vessel capacity and the volume of blood in the body and its compensation by the contraction of the blood vessels.

Any disturbance which destroys this

tonus allows the blood to be rapidly forced out of the supplying blood vessels with more or less stagnation in the larger vessels and, as we often say, "a man may bleed to death into his own veins," and as we better understand this there will be a lower mortality from so-called surgical shock and other vaso-motor disturbances. Unless there is considerable vaso-motor disturbance the blood vessels will contract so that even a comparatively serious hemorrhage may show only a short duration of fall in pressure.

As to the normal limits to which the pressure may go there is slight difference of opinion among observers. Personally, in the course of several hundred observations, I have not found in a normal adult an excess of 150, nor lower than 100, and I believe that by more careful examination and better developed diagnostic methods we shall bring the normal average to even closer figures if we take into consideration the mental condition of our patient and other elements which may temporarily alter the pressure.

The causes and effect of both supernormal and subnormal pressures are one of the most vital and most interesting studies which confronts the internist or the surgeon. In the normal individual tissue supply, secretions and excretions are carried on with little or no change in pressure because of the compensatory contracting of the vessels in the distal parts and dilatation in the parts supplied unless a considerable demand is made upon the parts of which we shall speak later. Exhaustion, both physical and mental, reduces pressure, while rest and sleep restore, observers claiming that as the time of awakening approaches the pressure nears the normal point and thus nature produces her own remedy for the pathological condition. I should call attention to the fact that in people beyond middle life some degree of sclerosis is so common that we will find a pressure higher than usual and yet normal for that individual and necessary for the functionating of the various organs and especially the kidneys, and we handicap elimination if we bring the pressure too low in those cases. I have not been able to find a fall of pressure during normal menstruation as reported by Weisner and I believe that normal menstruation and gestation have no effect upon pressure and any rise should be viewed with suspicion and all sources of elimination carefully watched and the sphygmomanometric observations are an additional safeguard to the pregnant woman. Labor raises the pressure by the increased abdominal pressure, offsetting the dangers of chloroform anæsthesia which reduces pressure ordinarily and in some cases of abnormally high pressure or where the arteries are diseased often proves very serviceable as a therapeutic measure aside from the anæsthesia produced in contrast to ether which may raise the tension. I believe sex to have little effect upon pressure.

In the present imperfect pathological knowledge of the cause of arterial degeneration it is difficult to outline with any degree of certainty the etiology which is, I believe, in most cases a chain of causes —the most important perhaps being biochemical—and I would emphasize the effect of our rapid American life with its nerve strain and consequent effect upon metabolism whereby imperfect digestion and constipation, half digested proteids and metproducts of the bowel are thrown into the circulation and these with many other factors such as occupation, vicious drug habits and the various diseases form a chain which enter into every life and, in fact, arterio-sclerosis is the climax of all pathogenic changes that have entered into the life of the individual, and I believe a correct knowledge of the etiology will leave little

room for the idea that sclerotic changes occur as the result of functional hypertonicity. The so-called functional hypertension which has been heralded as the cause of much trouble by producing permanent changes in the vessel wall seems to me to be without foundation and simply another way of saying that we have been unable to determine the cause. Most cases of functional hypertension are simply false calls to the vaso-motor center, a simple illustration of which may be had by taking the pressure of a child and then have him imagine himself to be climbing a flight of stairs and if properly done the pressure will be found to be slightly raised by the false call because the vaso-motor center is more under the direct control of the cerebral centers and more susceptible than the other vital or medullary centers. When a mental shock is received or unusual mental activity is required, nature tries to supply the parts with the required increased supply of blood and in order to do this she must, as we have said before, compensate in other parts, but the blood vessels of the brain not being connected with the vaso-motor center is controlled by raising or lowering the pressure of the remainder of the system.

We find cases that do not present superficial sclerosis yet show a constant high tension and on the contrary we see cases of marked hardening of the superficial arteries with no marked rise in the pressure and we then feel like saying that the whole study of the blood pressure is a farce and misleading, but we must remember that the post-mortem table often shows cases with marked superficial sclerosis while the splanchnic vessels show very little change, and on the other hand the superficial vessels may appear normal while the pressure may be high, due to a sclerosis of the splanchnic vessels, for we seldom have a persistent high tension unless the splanchnic vessels are involved as they are more capable of compensating because of their size. Any small set of vessels may become sclerosed, due to the pathological processes which may have taken place in the parts, and an important example is found in the coronary vessels after some inflammatory cardiac diseases, there being enough toxin to produce local sclerosis and yet not enough when mixed in the general circulation to produce such results.

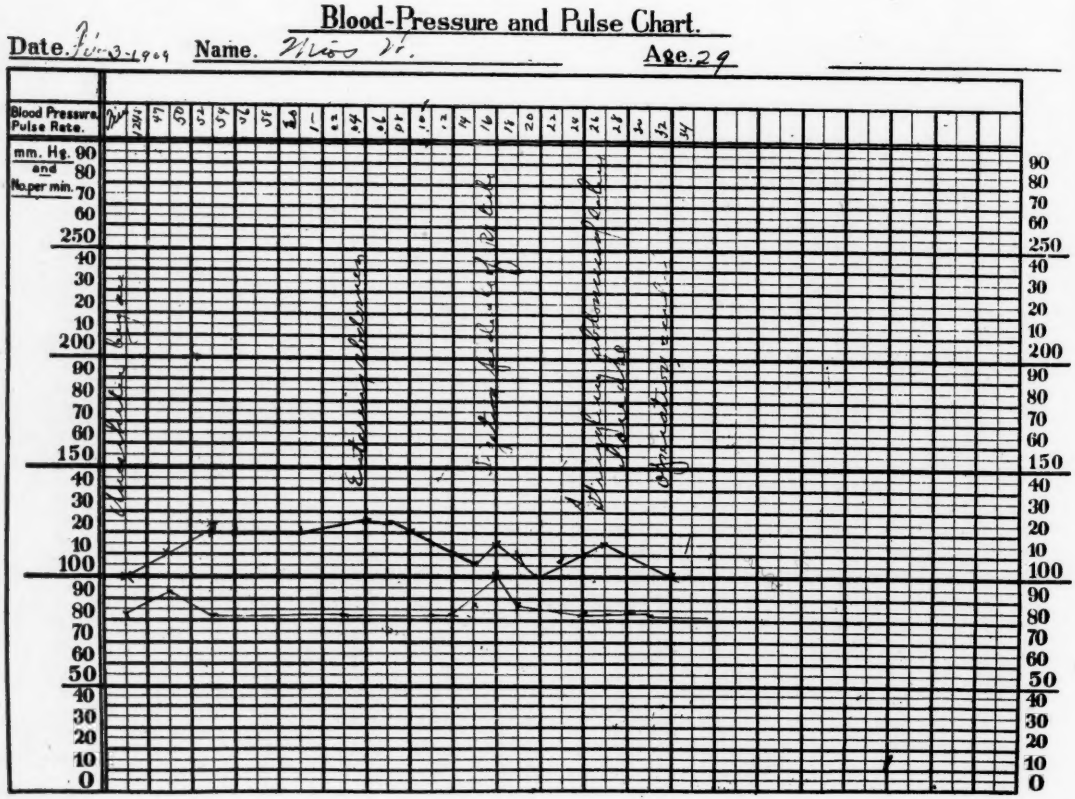
In acute inflammatory conditions of the kidney the manometer will give but little aid in diagnosis, but as the case approaches an uræmic stage it is of great importance and serves as a guide or warning of the approach of such a condition. It is in chronic nephritis that the blood pressure observations are of inestimable value and could I have but one I should prefer the blood pressure chart to the urinalyses as I have mentioned before the close relation between blood pressure and elimination by the kidneys, and the effect which may be produced in the brain. Renal ptosis or general ptosis is not a disease which effects the system through the kidneys themselves but is only a symptom of that lax condition of the abdominal support of the splanchnic vessels allowing an engorgement by its effect upon the vaso-motor nerves at the expense of the rest of the system, causing nervous and mental symptoms because of the lack of blood supply, and it is the support of the blood column by a properly fitted renal bandage with its effect upon the blood pressure which relieves the symptoms more than the restoration of the organs to their normal position, and we can readily see why surgical measures fail to relieve the symptoms. In many individuals if the manometer shows a low reading it may be explained by a thorough examination of the abdomen while if the ptosis is due to other causes and the vaso-motor tonus

is strong we may find fallen kidneys which have produced no symptoms. The following cases best illustrate the point:

Case 1.—Female, age 52. Arteries show beginning sclerosis, ptosis of both kidneys, the right being more marked than the left, abdominal walls lax and nonsupporting, urine of low specific gravity, no albumin, no sugar, heart normal, blood pressure low, patient very nervous. When I first saw this case, patient was unconscious and remained so four days from an apparent edema of brain; since that time, four years ago, has had one spell which lasted only one day but nearly every day has one or two dizzy spells which are mild and only last a few minutes and are relieved by a drink of cold water which I believe stimulates the vaso-constrictors. Patient has consented to wear a renal bandage and have ordered one to measure.

Case 2.—Male, age 42. Abdominal walls normal and giving proper support, blood pressure normal. About one year ago while operating for gall bladder disease I found ptosis of right kidney which could not be felt through the abdominal wall; patient recovered from operation and is doing hard manual labor and in good health.

I do not believe that the study of the subject in nervous and mental diseases has been sufficiently worked out so that we may lay down any firm rules, but bearing in mind that many mental disturbances are often the result of insufficient elimination and that nature endeavors to increase it by raising the pressure we will often be set on the right track quicker by the manometric reading than by any other means of diagnosis; and again I want to emphasize that the



finger is worse than useless in taking tension, for it will often mislead and cause the loss of valuable time. I know this from observation in my own work and of the work of others compared with the manometer observations.

The influence of alcohol is not a direct one upon pressure and observations do not show marked effect and while that fact does not lessen the value of alcohol in fevers it does as a remedy, in shock and other forms of vaso-motor collapse. The effect of tobacco is to increase the tension and this fact must be taken into consideration in handling cases of high tension.

The study of blood pressure in surgery and surgical conditions opens a field of immense interest and profit to the surgeon. My own experience in this line has been limited and what I am able to present along this line has been gained more from the experience of others and it is through the courtesy of Drs. Balch and Fulkerson of Kalamazoo that I present the two charts showing the blood pressure during operation, the one on the stomach and the other a pelvic operation. In the experience of every one the rapidity with which nature will restore the pressure after a severe hemorrhage by compensatory contraction of the blood vessels has been brought to notice while the same amount of blood lost by a hemorrhage lasting several days will require several times as long for recuperation because of exhaustion of the vaso-motor center, and not only do we get the effect of the loss of blood which has left the body but through the exhaustion of the vaso-motor system the patient, as we say, bleeds into his larger vessels and the manometer tells us the condition with which we have to deal as it does in collapse and shock, which are allied conditions, and in the treatment of which the saline injections have been used with such marked success because it filled the vessels until nature gained enough vitality in the vaso-motor center to strike a balance between the contained and the container. In the hands of Turk the intra-gastric bag seems to have accomplished much in the treatment of collapse and shock by its stimulating effect upon the vaso-constrictors, and the stretching of the sphincter and also stimulates the constrictors ani raises tension and it is because of this action that in cases of cardiac disease with a high tension that much caution is required in such procedures as compensation may be broken and our patient beyond help in a very short time. Alarming personal experience has impressed the author very forcibly of the dangers spoken of.

The use of the manometer in head injuries and diseases is of great importance, but we can only allude to it here with the statement that a low pressure after injury is a contra indication to early operation and the treatment is more the treatment of shock, there not being enough blood supply to the medulla, while Cushing and other observers consider a high tension an indication for operation for relief of pressure whether there is hemorrhage or not. In differentiating between a paralysis due to hemorrhage and that due to thrombus we find in the former a high tension while in the latter a low tension. The effect of operative procedures upon the brain on pressure are of vital interest to the head surgeon, but can not be discussed here for want of time. In the removal of pleural exudate the pressure is lowered and requires careful watching in marked cases. Crile has reported a moderate rise in pressure in his observation of a series of acute peritonitis which would make pressure observations of prognostic value in appendicitis, typhoid fever and allied diseases. In abdominal operations the skin incision produces a small rise but is followed by a

more marked one upon opening the peretoneal cavity after which there is no marked rise in a short operation unless there is considerable rough manipulation of the viscera. Chloroform reduces the pressure while ether has only a small effect and that is to raise the pressure. I have been unable to find the record of any careful observations made while using hyoscine, morphine and cocaine.

It is not the purpose of this paper to go into detail in regard to the merits of the various apparatus on the market for the measurement of the blood pressure, but since Hale made the first observation by inserting a tube into the crural artery of a horse and connecting it with a vertical glass tube we have developed manometers which, though of course not so accurate as the impossible direct method, yet give comparatively accurate results as compared with direct manometric observations. A few points should be considered in selecting apparatus. With the narrow 5 centimeter armlet in some cases where the arm is large and muscular the results may be misleading and untrustworthy, aside from this I have been unable to find the other objections to the apparatus using the narrow armlet of much importance, as in most cases the systolic pressure is all that is necessary. The manometers which depend upon a spring instead of mercury are not stable and have to be readjusted at intervals which makes them a source of inconvenience and at times unreliable. For an all around apparatus I believe the Stanton to be the most practical and at the same time it gives the diastolic pressure when it is desired. As to the method of taking the reading, ideas differ, some claiming that the point at which the pulse dissappears and that at which it reappears are to be taken and the average of these is to represent the mean pressure and for the unpracticed hand this is a good rule, but as one acquires practice in the work these two points draw very close together if they do not unite, the amount of pressure required to reopen the artery being very small as a rule.

Use your own apparatus.

The idea held by some that even after diagnosis of sclerosis and increased pressure nothing could be done is a reflection upon the science of medicine and far from the truth as in few conditions does a knowledge of physiology and pathology enable one to better accomplish results and add to the average length of life. Most of such cases are due to poor elimination from a handicapped organism, and aconite with thorough catharsis with a saline, preferably magnesium sulphate, will in most cases bring the pressure down below the point of immediate danger and should this fail the use of the coal tar derivatives may be cautiously tried, then by means of those diuretics which act upon the kidney cells as do the potassium salts and these with nitroglycerine will usually hold the pressure below a point which threatens the continuity of the vessel wall.

The diet should consist of nourishing and easily digested foods with only a small percentage of meats. Water should be taken freely, either distilled or some of the mineral waters being preferable. Alcohol even in moderate quantities must be forbidden. In short, the whole effort should be to assist nature in establishing and maintaining a condition of compensation and the patient must be forced to see the necessity of an absolutely moderate life and that there must be no intermissions when the daily routine of moderation in anything shall be broken.

HYDRONEPHROSIS AND PUS PRODUCING INFECTIONS OF THE URINARY TRACT COMPLICATING PREGNANCY*

CLARA M. DAVIS, A. B., M. D.

Lansing, Michigan

The introduction of the cystoscope and ureteral catheterization, and the advance in surgery of the kidney during the last five years, have thrown a new light on the infectious processes in the urinary tract, so that recognition of the milder and more transient cases is now possible, and the frequency of such conditions, as usually happens when diagnosis is made easier,—is found to be greater than was formerly supposed.

That this is a matter of interest to the gynecologist and is accountable for a definite, if small, number of cases, in which lumbar backache and inguinal (usually called "ovarian") pain, with general malaise and occasional slight febrile attacks,—the whole often summed up by the patient as "female trouble," with all the symptoms disappearing coincidently—with the disappearance of the pus from the urine, the occurrence of two cases in the writer's small practice would seem to suggest.

But it is as a complication of pregnancy that I purpose bringing to your consideration the subjects of this paper, and with your permission I will report the following case:

Report of Case

At midnight, March 20, 1909, the writer was called to attend the patient, Mrs. C. M. B., whom the mother stated she had just brought home from another city and who was having a miscarriage.

On arriving at the house the following history was obtained—the personal history as given at this time being rather misleading:

Family history—parents both living. Father had pulmonary tuberculosis as a young man and went, soon after marriage, to the West for his health. Has been able to follow his business as a commercial traveler, but three (3) years ago had a rather severe pulmonary hemorrhage and is not strong. No history obtainable of any genital or urinary involvement, but has times of very frequent, alternating with times of difficult, urination. Mother is forty-one years old and frail—says coccyx was broken in first labor. Five years later and after second labor had abscesses along spine in sacral and coccygeal region, also on neck of uterus which had to be lanced frequently and discharged a large amount of pus. Also had "Bright's disease" with albumin in urine (no microscopic examinations were made), dropsy so extreme that skin of feet cracked open, "spinal trouble," with periods of stupor and unconsciousness and was confined to bed three years.

Does not have dropsy or edema now, and while frail thinks she has recovered with the exception of severe pain at periods and attacks of difficult urination.

One brother is living and well. Otherwise family history is negative.

Personal History

Age twenty-three years; has always been rather frail; married four years; one child two and one-half years old born at seven and one-half or eighth month. Pregnancy was

*Read before Michigan State Medical Society at Kalamazoo, September 15-16, 1909.

normal except for large amount of lumbar backache and menstruation the first two months. Labor was instrumental and cervix torn and not repaired; slight "inflammation of bladder" with fever one day during puerperium; recovery slow. Menstruated regularly every month although nursing infant and until February, 1908, when periods stopped, and in May, 1908, had a miscarriage (cause unknown) and the attending physician said fetus was a six months' one.

Recovery was uneventful, menstruation regular and in August, 1908, no periods having been missed, patient was suddenly taken with hemorrhage and in a day or two a six weeks' fetus was expelled.

PRESENT PREGNANCY

Patient menstruated last, Oct. 30, .1908, and thinks she may have been pregnant a month earlier. Severe morning nausea during first three months. Life felt March first.

Yesterday morning, March 19, began to have violent pains in right lumbar region—lower abdomen and also low down in back, and as these were paroxysmal in character, lasting from one to two minutes, patient thought she was going to miscarry and called a physician. He examined and found no dilatation, but considered that miscarriage would occur and as mother wished to bring her home gave her some sedative tablets. Patient said that urine was examined and said to be free from albumin. There was no nausea and bowels had moved in morning. Pain since coming to Lansing had steadily increased and she was suffering greatly.

S. P. Patient in bed, dorsal decubitus, complains and looks to be in very great pain, and is very nervous. T. 98.9°, P. 78, skin sallow and pale and dark circles under eyes. Each wrist shows on posterior surfaces several parallel linear scabs $\frac{3}{8}$ to $\frac{5}{8}$ in. long.

Abdomen is one (1) centimeter below level of ribs, right flank looks a little fuller than left one, fundus uteri 3 fingers above symphysis pubis. No contractions felt—no rigidity of recti muscles—marked tenderness in hypo-chondriac and right inguinal regions—and especially in right lumbar regions posteriorly.

Percussion shows tympany over course of large intestine, slight dullness in right flank.

Vaginal examination,—showed absence of dilatation or discharge—old bilateral tear of cervix with much cicatricial tissue and follicles that feel like shot—cervix 3.5 cm. long—low in vagina, being right against perineum which also shows old internal tear, marked tenderness in right vaginal fornix and posterior cul-de-sac.

As patient had urinated just before I came no specimen could be obtained for examination. No ice could be obtained owing to the lateness of the hour, so heat was ordered—and codein gr. 1. q. hour p. r. n. for pain.

March 21, at 9 A. M.—T. 99.0°, P. 80, good quality, patient had a fair night but had taken codein gr. 1, q. hour, and had suffered pain whenever the effects of the codein wore off. Had ½ glass of milk which had heen retained. Vaginal examination showed conditions the same as the previous night. Fetal movements visible and very painful to patient. Right lumbar region is fuller on palpation than left, and tenderness on pressure is extreme. There is also tenderness in the right flank and right hypochondrium, no rigidity of recti, tympany over large intestine and in left flank.

Examination of the chest was negative. At this time the following additional

history was obtained, after assuring the patient that there was no evidence of a miscarriage beginning, and after much questioning.

Patient had scarlet fever in childhood and when 17 or 18 years of age, more or less persistent, and quite severe pain in lumbar region, extending to spine. During the preceding month, February, she had several attacks of pain in the lower lumbar region so severe that she was obliged to lie down for an hour or two at a time. Also although drinking water very freely, she was passing urine scantily, sometimes urinating only twice a day and then only about ½ a cupful at a time.

During February and March, too, the patient said the abdomen grew larger very rapidly (the bulk of the enlargement being on right ride), so that she was unable to fasten any of her bands, and was as large as 7½ or 8 months previous pregnancy.

On Monday, March 15, she had a severe nervous shock, and bodily strain, being choked, thrown backwards across bed, body bruised, etc.

The following Friday, March 19th (two days ago), the abdominal enlargement, to use the patient's words "went right down, so the abdomen was flat." Coincidently without nausea, pain or tenesmus diarrhea ensued, ten or twelve movements occurring within twenty-four hours, the stools being nothing but water.

The same day patient urinated more freely, and on the next morning, the 20th, violent pains began.

As the pain was increasing morphine gr ¼ was given and icebag applied to the right lumbar region.

Blood and urine examinations were made that morning and showed the following:

White blood cells 12,500, polymorphonuclears 78%, Hb. 75%, red blood cells 4,100,000.

Urine. Sp. G. 1.017. Color pale tan, turbid with flakes that look like pus, sediment on standing 1.25 cm. deep, reaction acid. Albumin 1-10 volume.

Microscope shows pus cells in enormous numbers. Masses of urinary epithelium, few red blood corpuscles, no casts, actively motile colon bacilli.

Stained smear of sediment showed colon bacilli, and a very few cocci.

Considering now that the conditions were probably originally hydronephrosis, and that pyelonephritis (or pyonephrosis) was present I asked permission to call a surgeon in consultation. The family refused until they could communicate with the patient's father who was out of town and could not be located for several hours. At 5 p. m. I was informed that the pain had suddenly left and the patient was comfortable, and was told that the mother who was somewhat interested in psychotherapy had given her daughter a treatment at about three-thirty, and the pain had stopped at about four. They now refused to have a consultation.

At four-thirty the patient urinated, the urine having been passed in three different portions in different vessels as directed. The three portions were equally turbid on passing, and looked like thin pus, the pus on standing being more than ⅓ by volume, i. e., 2½ ounces of the 7 ounces voided.

8 P. M.—T. 99 degrees, P. 78. Patient comfortable. Strict milk diet with water in large quantities ordered, and enema tomorrow morning if bowels have not moved. Also Hexamethylenamine gr. 5 q. 4 hrs.

March 22. A. M.—T. 99°, P. 78. Enema resulted in large stool, partly clay colored, partly dark, very offensive. Quantity

of urine in 24 hours, 750 cc. There was still a large amount of pus and albumin, and under the microscope many plugs of pus, a little larger than casts, and large masses of epithelium were seen. Patient had passed a good night without any severe pain, although there was moderate continuous aching in the right lumbar region. Tenderness was about as before. That evening, 5:30 or 7:30, the patient had severe pain in right lumbar region again which however stopped without any opiate or psychotherapeutic treatment.

March 23.—T. 99°, P. 78. No change in the findings on physical examination. Patient had passed a good night, and a good bowel movement. During this day there was a slight vesical tenesmus for an hour or so, and from 10 a. m. to 4 p. m. severe pain in the right lumbar regions which was relieved by gr. ¼ of morphine sulphate given by mouth. Twenty-four hours' quantity of urine was 900 cc, the quantity of pus and albumin being practically unchanged.

March 25.—T. 98.8°, P. 76. On examination tenderness was less and light, soft, meat-free diet was ordered.

Blood examination showed: Hb. 70%; reds 4,000,000; whites 9,200. Twenty-four hours urine was 1,280 cc., slight decrease in amount of pus and albumin. On this day methylene blue was given, gr. 5. This appeared in the urine passed six hours later.

From this time on until labor, which occurred July 20th, the urine examinations, which were made bi-weekly, showed an average daily quantity of 1,200 to 1,450 cc. S. G. from 1.012 to 1.017 and the quantity of albumin and pus steadily diminished, until the former disappeared. A large number of leucocytes were found, however, until labor and after. For a number of days after the dose of methylene blue was given, blue stained plugs of pus and masses of epithelium continued to appear in the urine.

This appearance of methylene blue in the pus after the urine has ceased to show color, is stated by Edwin Beer to occur only in pyelonephritis, not in simple pyelitis, but I have been unable to find records of others' work confirming this.

Cystoscopic examination and ureteral catheterization were urged from the first but refused by the patient.

The patient sat up in about ten days and was about the house until her confinement. The tenderness in the right flank persisted for over eight weeks, and recurred after labor for about two weeks.

The blood showed progressive anemia; Hb. falling to 65%, reds to 3,400,000, whites counting from 7,000 to 9,000; during three weeks in May 12,000 to 14,000, dropping again to about 7,000. Evening temperature was 99° to 99.8°. P. 80 to 88.

Patient was very pale, ears looked waxy, there was a slight edema of face and ankles, severe attacks of facial neuralgia, and after sinking of the uterus, which occurred June 19th, edema of the vulva and difficulty in emptying the bladder except in the knee-chest position.

Labor was normal in every way, occurred at full term and an eight and one-half pound infant was delivered in good condition; vertex R. O. A.

Through a misunderstanding the first urine passed by the infant was not saved, so that it could not be tested for methylene compounds, but no blue stains were seen on the napkins.

During the first few days of the puerperium tenderness in the right flank was extreme and there was some recurrence of pain in the right lumbar region.

The urine showed a small amount of albumin during the first week and up to

the present still shows a moderate number of leucocytes. The blood has shown a steady improvement and the patient has, seemingly, made a good recovery and nurses her infant.

Systolic Blood Pressure (Cook's Instrument) was 122, June 25th.

The opthalmo-reaction to tuberculin was negative.

The pelvic measurements were { Intercrestal, 29.5; Interspinous, 26; External Conjugate 19.5

The interesting points of the case are:

1. The family history of long standing tuberculosis in the father and abscesses and "Bright's disease" with dropsy in the mother.

2. The importance of a correct anabasis and the difficulty of getting it in this case, owing to the fact that the patient and family had settled on a diagnosis of miscarriage.

3. The relation of the traumatism to the disappearance of the hydronephrosis and the subsequent course of the case.

4. Psycho-therapeutic treatment given by the mother with the coincident disappearance of pain, the sudden appearance at about this time of large quantities of pus in the urine, showing that cessation of pain was due, not to the mental treatment, but to the free drainage of pus, and illustrating how carefully cases should be scrutinized in which mental treatments are assigned as causes of relief of pain or cure of disease.

5. The importance for diagnosis of a microscopic examination of the urine in all cases of severe abdominal or pelvic pain in pregnant women.

6. Absence of bladder involvement throughout.

7. Benign course in the absence of any but the simplest treatment.

8. Normal character of the labor which occurred at full term, and the prompt convalescence.

Consideration of the Subject in General

That the dictum of Hirst "that pyelonephritis has the history of other infectious diseases, *viz.*, is aggravated by pregnancy and reacts unfavorably upon it" is correct, can, the writer thinks, hardly be doubted.

In support of this may be offered the facts that, as shown by the literature, it tends to recur with successive pregnancies, that at times it necessitates emptying the uterus, that it has involved such procedures as nephrotomy and nephrectomy, that fetal mortality is given as high as from forty to sixty per cent, and that a fatal outcome for the mother has resulted in a certain number of reported cases.

In view of these things the statement of Peterson and Cragin that the presence of such disease is a contraindication to marriage and pregnancy would seem to be correct.

That pyelonephritis occurs in pregnant women who have not had the disease before and in such has been cured by terminating the pregnancy and that it has been known to recur with successive pregnancies, the patient being free from the disease when not pregnant, are evidence that pregnancy is a true etiological factor. At least two theories have been advanced in regard to this, *viz.*, the theory of compression of the ureters and that of toxemia lowering the resistance of the kidneys.

Compression Theory—This is that the predisposing cause is the lowered vitality of the ureter and kidney (usually the right) due to compression of the ureter by the pregnant uterus especially in contracted pelvis.

The reasons for the more frequent in-

volvement of the right side as given by Cragin are—

(1) Rotation of the uterus on its long axis so that it tends to lie in the right oblique diameter of the pelvis, thus presenting the more room as the rectum encroaches on the left oblique diameter.

(2) In the latter months of pregnancy the fetal head lies more often in the right oblique diameter than in the left.

(3) As the pregnant uterus grows it tends to displace the ureters to the sides of the pelvis against which it compresses them. As the uterus usually develops more to the right than to the left, the compression is usually greater on the right side.

Cragin also claims that autopsies on pregnant and recently delivered women show that one ureter is frequently dilated, sometimes both.

Toxemia Theory—C. B. Reed states this as follows: "Pyelonephritis may be regarded as a distinct disease of gestation due to degenerative changes in the renal epithelium and parenchyma resulting from the transudation or excretion of the toxins of pregnancy through the kidney tissues, plus bacterial invasion, probably of vesical origin. The character of these changes should be such as accompany the kidney of pregnancy."

While B. Coli Communis is accepted as the usual infecting agent, it is by no means agreed as to how infection occurs, some considering that it is an ascending infection from a previously infected bladder, others that it is a descending infection coming from the blood stream by way of the kidney, and others, again, that it is propagated directly from the intestine. It seems to the writer that it might occur in any of the above ways.

On the other hand, hydronephrosis is commonly conceded to be due, when appearing in pregnancy, to compression of a ureter by the pregnant (often displaced) uterus, and in the case just reported, compression of the right ureter with ensuing hydronephrosis, traumatism, and colon bacillus infection directly from the intestine, seems very probably to have been the course of events.

DIAGNOSIS

Pyelonephritis occurring in pregnancy has been more frequently confused with appendicitis than with any other condition, owing to the frequency of pain in the right iliac region. A. Sippel is of the opinion that many cases escape recognition or are diagnosed appendicitis and cites one case operated on under that belief. It has also been confused with gall stone colic and extra-uterine pregnancy.

As the symptomatology is obscure, the importance of a microscopical examination of the urine, if not in every case of pregnancy, at least in every case of severe abdominal pain in the pregnant woman, is at once apparent, and in conjunction with lumbar tenderness, fever and leucocytosis, the presence of pus and albumin in the urine settles the diagnosis.

In the literature examined no instance was found in which the condition had been mistaken for a beginning miscarriage. A hydronephrosis developing in pregnancy should not offer much difficulty in the way of diagnosis.

PROGNOSIS

On *a priori* grounds the prognosis of these troubles might be considered to be that of the same diseases under ordinary conditions plus the added risks entailed by pregnancy. It is interesting, therefore, to note that Edgar and Reed consider pyelonephritis a relatively mild affection rarely requiring more than conservative treatment, and it is not infrequently referred to as a self-limited disease lasting about two weeks.

Such a view seems to the writer hardly

warranted in a condition in which the usefulness of one kidney, and that at a time of unusual demands upon kidney capacity, may be greatly impaired and the patient forced to fight infection as well. The possible necessity of a major operation, as nephrectomy, or nephrotomy, would also place it among the serious complications of pregnancy and incline one to believe that if not alleviated it may prove fatal.

The fetal mortality is given at from 20% (Cadwallader) to 60%.

TREATMENT

Since a large number of cases will recover under conservative treatment, this should be tried except in cases seen late or those with urgent symptoms and signs. It consists in confinement to bed (position considered very important), the patient lying on the side opposite to the one involved to facilitate drainage, large quantities of fluids by mouth, urinary antiseptics, attention to the bowels and strict milk diet followed by light meat-free diet as patient improves.

The probability of danger to the other kidney should be kept in mind in conservative treatment, and in event of persistence of high leucocyte count, fever, lumbar pain, radical intervention by (1) induction of labor, or (2) nephrotomy or nephrectomy is indicated.

Since the object in view in either case is drainage, the kidney operation would seem to offer the surest means, besides giving a chance for the life of the child.

Ureteral catheterization should be done whenever possible in these cases, in order to determine the presence of one unaffected kidney when operation is to be considered and to give information as to the patency of the ureter for drainage, and the possible fatal inefficiency of the kidneys for continuing pregnancy in cases under conservative treatment.

It would also seem that if the catheterization were successful, renal lavage might give good results.

I have not in a somewhat brief survey of literature been able to find reports of ureteral examinations in pregnant women during various months of pregnancy, but think such might furnish interesting data.

In conclusion, further careful study of these cases is needed, especially in regard to the various etiological factors, and involves, (1) Study of course of pregnancy in women who have a known cystitis without pyelonephritis at time of conception.

(2) Pelvic measurements in cases of hydronephrosis and pyelonephritis in pregnancy to determine whether pelvic contraction is more common in these cases than in normal cases.

(3) Ureteral examinations to determine the question of pressure of ureters as a factor.

(4) Autopsies in fatal cases.

The literature of pyelonephritis and similar complications of pregnancy falls naturally into two classes, i. e., that of books on Pregnancy and Obstetrics, representing the specialists and teachers; and journal articles and case reports representing the recent experience of the profession at large.

In general it may be stated that there is no uniformity of opinion as to the frequency of occurrence, etiology, treatment, or prognosis for mother and child respectively.

The American Text Book of Obstetrics makes no mention of any of the conditions with the exception of pyelonephritis as a possible ascending infection from a primarily infected bladder.

Davis in his Treatise on Obstetrics for Students and Practitioners (2d edition) merely mentions that pressure on the ureters may occur, especially in cases of

contracted pelvis, causing dilatation, leading ultimately to inflammation.

Cadwallader, in the Handbook of Obstetrics, states that "Pyelonephritis (1) occurs later in pregnancy; (2) is easily confused with appendicitis; (3) the prognosis is grave; (4) 20% abort spontaneously; (5) conservative treatment is indicated, but (6) emptying the uterus will be necessary in many cases.

Edgar, Practice of Obstetrics, 3rd edition, says, of pyelitis, that "it is very rare during pregnancy, being far more common in the puerperium," and in considering pyelonephritis says: "(1) the etiology is entirely obscure, as compression of the ureters will not account for the lesion, and mentions that the bacillus-coli-communis is said by some to be responsible, it being held even that it gains access to the urinary tract by direct propagation from the intestine; (2) that it occurs any time after the fourth month of pregnancy; (3) that the symptomatology is obscure and diagnosis made by exclusion of cystitis; (4) that it persists till pregnancy is terminated and may recur with successive pregnancies, but does not seem to be severe enough to require the induction of abortion; (5) the treatment is conservative." Of hydronephrosis he says: "It may occur as a result of pressure on the ureters. The treatment should be replacement of the uterus or kidney and they should be held in place if possible. Interruption of pregnancy usually occurs."

Hirst, Text Book of Obstetrics, 5th edition, says that pyelitis has the history of all infectious diseases, *viz.*, it is aggravated by pregnancy and it reacts unfavorably on it. He considers that it rarely develops primarily in pregnancy—that pressure on the ureters is the immediate cause; that induction of labor is indicated in the presence of (1) high leucocyte count; (2) fever; (3) large amounts of pus in the urine; and that spontaneous recovery after labor is the rule, that premature expulsion of the fetus is apt to occur.

Hirst also mentions hydronephrosis as a complication of pregnancy, saying that a displaced and adherent uterus may occlude the ureters with this result.

Peterson in "A Text Book of Obstetrics in Original Contributions by American Authors," says: "Pyelonephritis and pyonephrosis are not common in pregnancy." Their probable etiology is compression of the ureters with an ascending infection from the bladder. It usually occurs when pregnancy is well advanced; the symptoms are unilateral; the prognosis of previously existing disease is made distinctly worse by concomitant pregnancy; that the treatment is conservative, i. e., medical and hygienic, with nephrotomy or nephrectomy if indicated, evacuation of the uterus being ineffectual, and finally it is stated that the presence of such a disease in a non-pregnant woman is a contra-indication to marriage or pregnancy.

Hydronephrosis is also mentioned as occurring not uncommonly in a slight degree in the latter part of pregnancy, while acute hydronephrosis occurs occasionally associated with a reverted uterus.

Williams, Text Book of Obstetrics, mentions a series of twenty-three cases reported in 1899, in *Philadelphia Medical Journal*, and concludes that it occurs in the latter half of pregnancy, that the etiology is compression of the ureters by the pregnant uterus, plus infection either ascending from the bladder or through the blood stream. That the disease may prove fatal if not alleviated, that the treatment is medical and hygienic, and if the condition becomes alarming premature labor should be induced for the sake of relieving pressure and getting drainage. He mentions two personal cases in which this has been done with good results.

The Journal of the Michigan State Medical Society

All communications relative to exchanges, books for review, manuscripts, advertising and subscriptions should be addressed to Wilfrid Haughey, A. M., M. D., Editor, 15 East Main Street, Battle Creek, Michigan.

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APRIL

EDITORIAL

Of course questions of priority and credit are of minor importance, but for the sake of their own scientific standing, investigators should be scrupulously careful to give due credit to their predecessors and should avoid the inaccuracy and injustice of giving to one man the credit of another's work.

Editorial Journal A. M. A., Jan. 29, 1910, p. 380.

The Council on Pharmacy and Chemistry—"It was also due to his (Dr. Simmons') constructive genius that the now celebrated Council on Pharmacy and Chemistry was organized, the efforts of which have been mainly devoted to the investigation and exposure of fraudulent proprietary medicine whether advertised to the profession or the laity."—*Quoted editorially by the Journal M. S. M. S., Feb.* 1910, *p.* 79, *from the Midland Druggist and Pharmaceutical Review, Dec.* 1910.

We here group for the information of all interested, the official records at our command, bearing upon the establishment of the Council on Pharmacy and Chemistry.

Realizing the confusion that exists relative to the ethical status of the various medicinal preparations, especially with reference to their use by the medical profession and their appearance in the advertising pages of THE JOURNAL, and being also impressed with the desirability, if not necessity, of subjecting the entire question to a careful scrutiny in order to reach an intelligent conclusion as to what articles are not in accord with the ethics of medicine and pharmacy, THE JOURNAL this week begins a series of papers on the relations of pharmacy and medicine. It is proposed to make a careful survey of the entire field, and to present the various phases of the many interests involved, including those of the advertiser and the readers of THE JOURNAL. What medicinal preparations shall be admitted to, and what debarred from, the advertising pages of a scientific medical journal is a vexed question, but the ever increasing number of preparations—many of which are secret nostrums—that are being foisted on the profession, makes it expedient that an answer be found if it is possible to find one. That the question is one full of interest to many is manifest by the large number of personal communications we have received on the subject since the appearance in THE JOURNAL, three weeks ago, of the Editorial, "What Shall We Class as Ethical Preparations."—*Editorial, Journal A. M. A., Apr.* 21, 1900, *p.* 1008.

. . . It is therefore not only desirable, but a medical necessity, that a systematic attempt should be made to evolve a plan whereby the legitimate remedies of this class may be made to respond to the ethics of medicine and the requirements of scientific pharmacy.—*Journal A. M. A., Apr.* 21, 1900, *p.* 988.

A committee of control, as already proposed, would be of great service in protecting inventors and determining the status of the medicinal articles.—*Journal A. M. A., May* 26, 1900, *p.* 1329.

When some two months ago THE JOURNAL announced its intention to subject the matter of proprietary medicines to a thor-

ough investigation, it realized that the task was a difficult one. While sporadic attempts have been made from time to time, by medical associations and by medical journals, but little progress has been made in checking the evils complained of and, in fact, but little light has so far been shed on the subject. . . .

The necessity for this departure needs neither explanation nor apology. The members of the medical profession have a right to demand that THE JOURNAL should at all times furnish such information as may be necessary to keep them informed on everything that is of practical value and, as far as is practicable, to expose charlatanism, deception and quakery. . . .

It may be interesting to some to know that the policy of refusing to accept advertisements of secret nostrums has already resulted in an annual loss to THE JOURNAL of over $8000. While a still further financial loss must come, there need be no fear as to THE JOURNAL being able to live on. In any event it will not shrink from the task it has assumed, nor permit any withdrawal of support or patronage of its pages to cause it to swerve from its position that secret medicinal preparations are incompatible with scientific medicine and rational therapeutics.—*Editorial, Journal A. M. A., June* 2, 1900, *p.* 1420.

Closely related to this (Journal Advertising) is our exact knowledge of the goods offered the medical profession and laity. Notoriously both parties are being humbugged by the sharp practices of commercial houses. To escape this a "clearing house" is a necessity. Such a house is beyond the reach of the Michigan State Medical Society but within that of the American Medical Association. It is suggested that the Michigan House of Delegates instruct its delegates to the A. M. A. to urge that body to establish such a "clearing house" in connection with its *Journal.* Beginning in a modest way, it would secure an analyst of capability, honesty and fearlessness beyond question, to examine one after the other, drugs and preparations of unknown composition, yet widely advertised and sold. Probably lawsuits might follow, but if the work were legally done there need be no fear of the outcome. Such "clearing house" would strengthen the organization by practically exhibiting its willingness to do that which aided every doctor in knowing the nature of his daily tools, and so reducing his chances of failure. Such a clearing house would make it easier for both national and state journals to admit to their advertising pages those things helpful to the doctor. There is no reason why the organ of the medical profession of the United States should not aggressively give battle to the enemies of said profession. Medicinal agents of unknown composition are not the least of these.—*Leartus Connor: Report of the Council to the House of Delegates, 39th Annual Session, Michigan State Medical Society. The Journal M. S. M. S., July,* 1904, *p.* 306.

Resolution by H. O. Walker, Detroit. "Clearing House for Medical Supplies of Unknown Composition."

Whereas, an exact knowledge of the composition and properties of substances used in the management of disease is essential to a physician's best success;

Whereas, commercial push, by advertisements and drummers, persuades many physicians (often the very elect) to use and commend drugs, mineral waters, artificial foods, etc., of unknown composition and effect;

Whereas, as it is impossible for the individual physician to verify the statements of sales agents, to separate fact from fancy, he often uses substances quite un-

like those indicated, to the discredit of himself and his art;

Whereas, the American Medical Association was organized to promote the exact knowledge and intelligent practice of its members;

Resolved, that the Board of Trustees, A. M. A., is hereby instructed to provide for the analysis of medicinal substances of unknown composition and undetermined effects and to promptly publish the results in the Association Journal.

Resolved, that the board of Trustees, A. M. A., be instructed to appoint a "Journal Clearing House Commission," three in number, to serve without salary, with authority to employ one or more competent experts, and to equip a suitable laboratory, at a yearly expense not to exceed five thousand dollars.—*Referred to Business Committee.*

"We endorse the recommendation of the Council and the resolution offered by Dr. H. O. Walker that our delegates to the A. M. A. be instructed to use their influence towards establishing a "Clearing House" in connection with THE JOURNAL in order that drugs and preparations may be examined by a competent analyst." —*Report of Business Committee, accepted and adopted. Journal M. S. M. S., July*, 1904, *p.* 300.

Dr. H. O. Walker of Michigan presented a preamble and resolutions which were unanimously adopted by the Michigan State Medical Society, May, 25, 1904.

(For resolutions see above.)

Dr. Harold N. Moyer, Illinois, moved that the resolutions be referred, first, to the Reference Committee on Medical Legislation. Seconded.

Dr. Harris, New York, moved as an amendment that the resolutions be referred to the Committee on the Establishment of a National Bureau of Medicines and Foods, and that action be postponed until after the report of that Committee on allied subjects. Seconded.

Dr. Moyer accepted the amendment, and the motion as amended was carried.—*Journal A. M. A., June* 11, 1904, *p.*1576-7.

Dr. Moyer, Illinois, renewed his previous motion that the resolutions offered by Dr. Walker of Michigan, on the report of the Committee on the establishment of a National Bureau of Medicines and Foods (provisional committee) be referred to the Reference Committee on National Legislation. Seconded and carried.—*Journal A. M. A., June* 11, 1904, *p.* 1579.

Report Reference Committee on National Legislation. Journal Clearing House Commission rejected.—He further reported instructions that the report on the communication from the Michigan State Medical Society was laid on the table. . . .

On motion of Dr. F. W. MacRae the report of the committee of the whole was adopted.—*Journal A. M. A., June* 18, 1904, *p.* 1644.

Five years ago we published a series of articles on "The Relation of Pharmacy to the Medical Profession." . . . The remedy suggested was a Board of Control to be composed of pharmacists and chemists, which should pass on all medicines offered for insertion in the advertising pages of THE JOURNAL. . . . Although its execution was deferred, the idea has never been abandoned, but has been kept in view ever since. For more than a year this idea has been under consideration and development. . . . In a quiet way tests were made regarding the practical working of the proposed plan, as it affected certain phases of the question and certain articles, and full consideration was given to the results to be expected, as well as to the possibilities and to the limitations,

before the Board of Trustees finally authorized the creation of the Council of Pharmacy and Chemistry, the name adopted, rather than "Board of Control," as originally suggested. . . .

The Board of Trustees at a meeting held Feb. 3, 1905, created by resolution an advisory board to be known as the Council on Pharmacy and Chemistry of the American Medical Association. The organization of the council was perfected at Pittsburg, Pa., Feb. 11, 1905.—*Editorial Journal, A. M. A., Mar.* 5, *p.* 719.

Detroit, Mich. Mar. 4, 1905.

TO THE EDITOR:—I have just read the matter regarding the Council on Pharmacy and Chemistry. This meets the requests of the Michigan State Medical Society presented at the last session of the House of Delegates of the American Medical Association. The Board of Trustees has appointed a "clearing house for unknown medicinal products." The difference in name does not matter, the idea is identical.

I am sure that you have thus done much to promote organization of the profession. You have started an active effort to help it in some of its perplexities—a help which it will appreciate. Then you have made it possible to place the advertising pages of THE JOURNAL of the Association on a scientific basis—thus furnishing a standard for the new medical journals—and for all medical journals that are willing to be guided by intelligence. It is most gratifying to note that it has been possible to secure the best men in the United States to go on the Council, men whose signatures will have the weight of honest experts, men who can be trusted both for their knowledge and for fair treatment. Further I approve of having a laboratory in connection with THE JOURNAL with competent men working therein—to help separate the true from the false, the helpful from trash.

Medicine has fallen much in esteem because physicians have been so ignorant of what they prescribed. Now the national organization has decided to make it easy to escape the thralldom of such ignorance—hence medicine must rise again to its normal power. I congratulate you on the movement.

LEARTUS CONNOR.

Correspondence Journal A. M. A., Mar. 11, 1905, *p,* 805.

Undoubtedly this (composition of ethical and non-ethical preparations) was realized by the Michigan State Medical Society which in 1904 adopted resolutions asking that the Board of Trustees of the American Medical Association create a "clearing house commission which should provide for the analysis of medical substances of unknown composition and undetermined effects and should have analyses made in reliable laboratories, or should equip a suitable laboratory and should employ one or more competent experts." These resolutions were presented to the House of Delegates of the American Medical Association last year and were referred to the Board of Trustees, but no definite action was taken at that time.

Five years ago a proposition was made to create a body to be called a "Board of Control," to be composed of pharmacists and chemists, which should pass on all advertisements of medicines offered to THE JOURNAL, but at that time the plan was not considered feasible. At our February meeting, after giving the matter full consideration, the Board tentatively created a body to be called the Council on Pharmacy and Chemistry of the American Medical Association, combining in this the principle recommended by the Michigan State Medical Society with that underly-

ing proposition to create a "Board of Control" five years ago.—*Report Board of Trustees to the House of Delegates A. M. A., 1905, Journal A. M. A., July 22, 1905, p. 265.*

H. O. Walker, Detroit, presented the following resolutions:

Whereas, Last year the Michigan State Medical Society urged the American Medical Association to provide means for determining the exact composition of medicinal supplies of proprietary substances, in general use, and for publishing the same;

Whereas, Said A. M. A. has established a "Council of Chemistry and Pharmacy" for this purpose, composed of persons both competent and trustworthy;

Whereas, The results already published, foreshadow the great importance of the work, as indicated by the approval of friends, and howls of these fattening on the ways "that are dark" in pharmacy;

Resolved, That the thanks of the Michigan State Medical Society be extended to the American Medical Association for putting into practical operation its request, at so early a date, and in so admirable a manner.

Resolved, That we urge the Council to push its studies of medicines of unknown composition, as rapidly as possible, and publish the same, that the individual doctor may better know his tools, that medical journals may have a correct standard in regulating their advertising pages, that honest, open pharmacy may be encouraged, and that outsiders may be attracted to organizations which thus are trying to help them in their work.

Resolution supported and adopted.—*General Meeting, 40th Annual Session Michigan State Medical Society, Journal M. S. M. S., Sept. 1905, p. 447.*

Since the foregoing was in type, information has reached this office which seems to show that in the years between 1894 and 1900, Dr. Chas. T. McClintock was proposing and discussing the same work that the Council on Pharmacy and Chemistry is now doing.

DR. FLEMMING CARROW

In common with the profession generally throughout the State, we have received the announcement that Dr. Flemming Carrow, of Detroit, has entered into a partnership with Dr. L. E. Grant, for the practice of medicine, limited to diseases of the eye and ear. This announcement precedes one which will appear later, saying that Dr. Carrow has permanently withdrawn from practice, Dr. Grant being his successor.

Dr. Carrow has been prominently identified with medical and political matters in the State for twenty years past. He returned from China, where he had been a surgeon in the public service of that country for a number of years, and was called to the chair of Ophthalmology in the University of Michigan, succeeding the late Dr. Frothingham, in 1889. His energies were devoted to teaching and the management of a large ophthalmic practice in Ann Arbor, until 1904, when he resigned to engage in private practice in Detroit. The University conferred upon him the honorary degree of A. M. in 1902, in recognition of his services and attainments. His surgical work while in China was recognized by the French and Portugese governments by special diplomas, and by the College of Physicians and Surgeons of Philadelphia for work done on the subject of foot-binding by the Chinese. In Detroit he has been honored by appointment as Consulting Ophthalmologist to Harper Hospital, and Governor Warner, in 1908, placed him on the Board of Reg-

istration in medicine in this state. He has been especially commissioned by the Governor to represent the State at various meetings of an educational character during the past three years. He will retire this coming autumn to his property in the State of Washington to pass the remainder of his life in literary work. Dr. Carrow has been a contributor to medical literature for many years, and wrote the article on Diseases of the Vitreous Humor in the American Text Book of Diseases of the Eye, published by Saunders of Philadelphia.

MEDICAL DEFENSE

At a recent meeting of the New York State Medical Society, James Taylor Lewis, counsel for the Society since the inauguration of its work in medical defense, in 1900, reported that he had handled a total of over 250 cases, of which 138 had gone to actual trial. Every case but one resulted in favor of the defendant physician, and this case is now on appeal, with a confident expectation of a retrial and ultimate victory. Not one dollar of damages has ever been paid.

Such a record of success as this is the best answer to the critical queries of "Will it work," and "How can it be done with so little money?" Our Michigan plan is identical in its essentials with the New York plan, and with equal support from the profession, will accomplish equal results for the Michigan profession.

The Medico-Legal Committee report that *four cases* have already been brought to their notice. One case is brought for alleged malpractice against an infant, *over four years ago*, and under the Michigan law such an action survives until the babe becomes of age. No insurance policy would provide for such a contingency, but cooperative defense can and will protect the doctor in this case. Another member is charged with assault, not as a criminal offense, but damages are asked, as in a malpractice case. One of the Physicians' Insurance Companies refused assistance on the ground that the charge was not malpractice, but the Medico-Legal Committee would have handled this case, had it not arisen before their work began, because such an attack against the reputation of a doctor (his co-workers believe it blackmail) is an attack upon the profession as a whole, and if ignored, would lead to the bringing of many other cases of a similar nature. Hence as a preventive measure, the Medico-Legal Committee should defend the action.

A third case has arisen in Lenawee County, against an able practitioner, who is sued for non-union of a compound comminuted fracture of the forearm. Neither negligence nor incompetence can be shown, but the doctor is blamed for a result, which in the light of all experience, is absolutely unavoidable. We hope by this work to eventually educate the laity and especially the profession, to the fact that bad results do not constitute malpractice. If the profession alone once learn this, and refuse to endorse and support the claims of dissatisfied patients, malpractice suits will become a rarity, because cases with legal basis are rare indeed.

ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION AT ST. LOUIS

For the Annual Meeting of the American Medical Association, to be held at St. Louis, Mo., June 7 to 10, 1910, inclusive, Central Passenger Association Lines have authorized one and one half fare for the round trip from all points in the Lower Peninsula of Michigan.

Tickets will be on sale June 4, 5, 6, 7 and 8, 1910, good for return so as to reach original starting point not later than June

20, 1910. Passengers desiring a longer return limit can have their tickets extended at St. Louis by depositing same with Mr. F. C. Donald, Special Agent, not later than 12 o'clock noon of June 20th, and upon payment of extension fee of $1.00 at time of deposit, thus entitling passengers to reach original starting point not later than July 20, 1910.

The Michigan Central and Illinois Central Railroads will run special sleepers leaving Detroit for St. Louis at 1:40 p. m. June 6, arriving at St. Louis 7:24 a. m. next morning.

The above route is most centrally located for all points in Michigan, as it provides for convenient connections with this train in Michigan at Ann Arbor, Jackson, Battle Creek, Kalamazoo and Niles, arriving at and departing from Illinois Central Station at Chicago, thus avoiding transfer.

Wherever convenient connections cannot be made, doctors and their friends can join the Michigan delegation at Chicago, leaving on the Illinois Central's 10:15 p. m. train for St. Louis, June 6th.

A large representation is anticipated. Sleeping car reservations may be made through the State Secretary at Battle Creek.

IN MEMORIAM

Dr. M. P. Fogleson, of Harvard, for some years a member of the Michigan State and Montcalm County Medical Society, died Jan. 26, 1910, of catarrhal jaundice, aged sixty-two.

He was born in Frederick, Ohio, in 1847. Ten years ago he came to Michigan and settled in Harvard, Kent County, where he enjoyed a large practice.

Dr. James M. Elliott was born at Yankee Springs in Barry County, Mich., Sept. 5, 1846. When he was two years old his parents removed to Hickory Corners, Mich. His preparatory training consisted of studies in the district school in Hickory Corners and in the Kalamazoo Baptist College from 1864 to 1866. In 1867 he took a course of lectures in Medicine at Ann Arbor. In 1868 he attended the Long Island Medical College in Brooklyn, N. Y., from which he was graduated. Since 1868 he has practiced his profession in Hickory Corners, Mich., with the exception of one year spent in Clinton, Iowa. In 1908 he removed to Battle Creek, where he has since resided.

Dr. Elliott was married in 1872 to Miss Ida C. Johnson. She died in 1880, leaving two children, Dr. James A. Elliott, of Battle Creek, and Fred H. Elliott, of Hickory Corners. In 1882 he married Miss Susan Courtright of Hickory Corners, who survives him.

He was a charter member and ex-president of the Kalamazoo Academy of Medicine, member of the Calhoun County Medical Society and the Battle Creek Medical Club, of the Michigan State Medical Society and of the American Medical Association. In all of these associations he was an active worker, contributing from a wellstored mind frequent papers of such practical nature that they were genuinely useful.

In the death of Dr. Elliott, which occurred January 28, 1910, from apoplexy, the profession of Battle Creek and the entire State have suffered a material loss. From a mind stored with the best of medical literature and carefully digested facts, he was able to bring to the bedside of the suffering help of no ordinary character. His mental activity gave him unusual power in the diagnosis of obscure conditions and ability to meet the needs of his patients.

He was a prominent member of the Baptist Church, and was deeply conscientious in the full performance of his duty. In social life none knew him but to love him.

PAPERS READ AT THE SECOND ANNUAL MEETING COUNTY SECRETARIES ASSOCIATION OF THE MICHIGAN STATE MEDICAL SOCIETY

HOTEL CADILLAC, DETROIT, MICHIGAN, JANUARY 13th, 1910

MEDICAL ORGANIZATION WORK

A. E. Bulson, M. D., Councilor Second District, Jackson

I esteem it a very great honor to again be invited to continue the talk of a year ago on medical organization.

That the wisdom of forming this organization of secretaries of the county societies into a permanent body, and an integral part of the plan of the organization of the medical profession of the state and nation, has been, I think, fully demonstrated by the experience of the past year, representing as you do every section of the State in your deliberations.

Certainly this is a step in organization, that will grow in interest and influence for the scientific betterment of the entire profession of the State of Michigan.

You, as secretary of this county organization, more than any other member, hold in your grasp the success or failure of your society.

You are, so to speak, the *vis a tergo* of your society; you must so plan the work that you may get the most out of opportunities open for the making of the society a success scientifically and socially.

There is an old adage that "water will flow no higher than its fountainhead" and, in order to disspell darkness, discord, jealousy, lack of interest and many other obstructing factors, there must be light. So you, more than any other member, as the secretary, must possess a special and peculiar fitness, coupled with an enthusiasm unremitting, and a spirit unquenchable if you would make of your society more than a name in your community.

The society should be made a living force to dignify medicine as a profession, to stimulate public respect for, and elevate the material, moral, and intellectual status of its membership. I am glad to say that most of our county societies are awake to the fact, that in order to make the most out of opportunities open to the membership, they have found it imperatively necessary to have, first of all, a wideawake, active, devoted and conscientious secretary, one who is not to "think society once per month, twice per month, but is thinking and planning all the time." He should be a man honored and respected by the laity, as well as by his professional associates; he should avail himself of every meeting of the annual conference of the secretaries each year; he should keep in touch with the movement that he may receive the benefit, counsel and experience of his brother secretaries. "It does not require much of a mind to fully understand that we are now in the midst of a mighty era in medical advancement, and he who is heedless of these warnings will soon find himself outstripped and relegated to the class of the non-progressive."

Every physician owes it to his patients to keep in touch with the advanced methods and experiences of his brother practitioners in his particular line of work, but even more than this, I would urge upon every physician, whether he is a specialist, or engaged in general practice, the importance of being in touch with every department of progress, in every field of medical advancement.

The specialist will be better for this general knowledge, and the all-around doctor have the pleasing satisfaction that he is in touch with the more advanced achievements of his profession. With this, and no less, should he be satisfied. The experiences of the past have taught us that the average county society, if left to itself, will become lethargic or dormant. To be sure, there are many exceptions in our State, but this as you well know is the rule. We all believe that "if a society can be made a living active force for good in one locality, a similar society can be maintained in another community where similar conditions exist."

I will mention another important qualification of a successful secretary, and that is, being able to enter into the most cordial relations with every member, from the oldest to the youngest.

We will concede that this is not an easy thing

at all times to carry out; especially is it made more difficult, if not really impossible, by the attitude of some of the members who are ever ready to criticize the program, and in fact everything regarding the work.

I am glad to note that but few of our county societies are troubled in this manner. However, there are some of the members who are everlastingly possessed of this kicking proclivity, and it requires more than human patience and wisdom to keep them in line.

Dr. J. N. McCormack has a most unique suggestion relative to handling this class of doctors. He suggests "that you elect them to some important office, a place of responsibility and considerable work;" if this fails to cure, the case may be regarded as certainly hopeless.

Now a one man society is of but little worth to the profession or community as a whole. I will also mention that cliques are also dangerous, and, sooner or later, will be the cause of disrupting your society.

What is needed is a broad and liberal spirit towards each other and if a brother offends, "kindly efforts in the interest of peace, conciliation and reformation" should always be borne in mind by every member.

It is a good plan to have an occasional meeting with all medical topics entirely eliminated, for the express purpose of discussing and practicing social ethics, and in this way be an important factor in dissipating misunderstandings, and promoting professional harmony. To these meetings I would have the doctors' families and a goodly number of the laity.

For a change from the strictly medical aspect of the meeting, you could carry out the suggestion of the "Medico-Legal Committee" and have once each year a meeting devoted to the discussion of the "rights and liabilities of the physician." "The recognition of the importance of the county society, as a unit, is the basic principle on which the work of organization has been, and is being, conducted. The most important unit in the scheme of organization is the county society, then comes the state organization, and the American Medical Association. The last is least important of the three; the first, the county society, the most important."

Every effort that has been made by the American Medical Association in developing organization, has been made with the above principle in view, the importance of the county or local society. Now the machinery all over the country is practically complete, and results must be looked for; these are many, but the most important is the making of the county society something more than a name, something more than the storing of an old garment. It must be a living torch in the community, in the front rank, fighting superstition and ignorance, ever ready to uphold the honor and dignity of the profession, and the betterment of society as a whole.

To accomplish these ideal requirements you will readily see requires the co-operation of every member. The secretary may direct, but he must have the hearty support of the entire membership. Each doctor must feel a personal responsibility in the success of the society; he should talk society among his associates, and when a new member comes into the locality, he should extend to him the friendly hand and invite him to the meetings.

THE COUNCILOR'S RELATION TO THE COUNTY SOCIETY

W. T. Dodge, M. D., Chairman of the Council, Big Rapids.

My experience having been limited to county societies in sparsely settled counties containing cities of moderate size, it is very likely that my conception of a councilor's duties will be inadequate for those whose districts include one or more large cities.

A councilor should become as intimately acquainted as possible with all the profession in his several counties. He should take advantage of every opportunity presented to become acquainted with the individual doctor residing in his district, whether the doctor be a member of his county society or not. If hard feelings exist between doctors in his district, or factions have been formed in any county, the councilor should not only be conversant with the facts, but should also know the causes that have brought about this state of affairs.

With a thorough knowledge of the condition of the profession in each of his counties, he will be in position to give valuable assistance when called upon.

The councilor should not try to reform every existing evil during one year nor even during his term of office, but with a full understanding of existing conditions he should give the officers of each society to understand that he is always ready to serve them when they so desire.

A councilor should be chary with advice

until called upon for it. Our county societies are quite competent to manage their own affairs and they are doing so very satisfactorily. They have a right to resent voluntary and officious advice even from the councilor of the district, and so the councilor should be tactful in any suggestions he makes at any time.

In the early days of our organization it was much different. The councilor first learned for himself the best methods of organization, and he found the doctors who assembled at his call to perfect a county organization, eager for instruction. Most of them had never belonged to any medical society and the councilor's hands were full in getting the various societies running smoothly.

Some of us may have developed during that period a dictatorial habit. We may have come to think it is part of our duty to continue in active management of our various county societies. If so, we have contracted a bad habit and should take treatment. The title of our office, councilor, in itself describes our duties. We should be ever ready with counsel when it is asked for. We should endeavor to visit each of our societies at least once a year, preferably upon invitation of the society, and thus keep up intimate social relations with the members. If the councilor confines himself within these limitations and also as far as possible leaves the management of the society to which he himself belongs, to his fellow members, his official life will be a happy one, his official visits will be green oases in life's memory and he will be broadened, developed, greatly improved in every way through his relations with the county societies.

THE BUSINESS AFFAIRS OF THE COUNTY SECRETARY

Archie MacKinnon, M. D., Secretary O. M., C. O., R. O. Medical Society, Lewiston.

In beginning the discussion of this subject the query that first confronts us is: What are the exact duties of the County Secretary? If I should attempt to enumerate the many duties imposed upon him it would entail a loss of valuable time, suffice it to say that the business side of the secretary's duties are enough to keep him in more or less trouble and anxiety.

If the mere sending out of notices that dues should be paid on a certain date would result in the prompt remittance of the same by each member, the secretary's duties would indeed be very materially lessened. Doctors are as a class poor business men. It is easily understood how the busy practitioner, receiving his notice to pay up, may at that very time be worried about a long drive which he is obliged to make at once, or about many patients waiting in his office, and in the turmoil of his busy life the notice from the secretary is lost in the jumble of literature and papers on his desk, and for the time, forgotten. In the meantime the poor secretary is wondering what kind of a report he is going to be able to make. The question of how best to collect dues must of necessity be left to the discretion of the secretary of each society, as he alone knows the needs of practitioners in his particular district.

Entering on my third year as Secretary of the O. M., C. O., R. O. Medical Society, I am convinced that this office should not be held longer than two years in succession by one member. It is an honor and an education that should be passed around that it may stimulate an interest in the work. Meetings should not be called more than four days in advance, ours coming on Wednesday. I issue the call on Saturday by mail, sending out a printed letter which often contains the first information that most members have of who is to participate. The question of how to get a committee on programs and scientific work together is one on which I would like to have some information or suggestions. It has been my experience that this is next to impossible, and this fact adds to the many trials of the County Secretary. A suggestion, which is that the smallest societies through the State might materially add to the interest of their meetings and increase the attendance of the same by mailing to each member a small bulletin, giving notice of the coming meeting and a short synopsis of the paper read and business transacted at the proceeding meeting. The expense of publication of such a bulletin, could be partially met by inserting advertisements for local merchants.

Any one secretary is not competent to report all classes of cases and this emphasizes the necessity of having a committee competent to report the work of the meeting. The effort to establish and carry out a course of post-graduate work as promulgated by the Journal of the A. M. A. has in the O. M., C. O., R. O. Society at least, proven to be a failure.

This is not caused by lack of clinical material but as stated above, is because of the lack of competent reporting of the minutes. Doctor

Carson's entire staff of stenographers could not get the best record of some of our meetings. It was a momentous subject when our president in 1907, Doctor A. J. Pettis, died and Dr. Oneal of Frederick was obliged to leave his extensive practice and go West on account of tuberculosis. Dr. Wright with a talk on opsonins would scarcely have been interesting. Then the boys expressed sentiments of brotherly affection, that would necessitate a Doctor Holmes to record where previous to the organization of the Society they knew each other but slightly. Good business would require the secretary to give bond to be held by the president; this is customary in fraternal orders and up-to-date business institutions.

Although the duties of the secretary are difficult and exacting, still there are many pleasant memories and associations connected with the position. Prior to the present reorganization of the medical profession along the line laid down by the A. M. A., many practitioners in certain localities were, if not bitter enemies, at least coldly indifferent to one another. Now it is different, the periodic getting together and discussing of mutual trials and tribulations has wrought many a lasting friendship and the Secretary has the satisfaction of feeling that he has in a measure aided in bringing this about.

POST-GRADUATE WORK

Wilfrid Haughey, A. M., M. D., State Secretary-Elect, Battle Creek.

During a lecture tour of this State, in the fall of 1906, Dr. J. N. McCormack, of Bowling Green, Ky., urged very strongly that medical societies should get out of the rut they were in. That they should undertake to make their meetings more interesting. He said the papers could often be improved upon by reading the text book within the reach of every medical man, and the discussions were stereotyped: "I am very much pleased to have had the opportunity of hearing the Doctor's paper. It shows an immense amount of work, and is a credit to him, and the Society. The Doctor is to be congratulated for his presentation of the subject, etc." McCormack gave the whole discussion, and then suggested that we do something to remedy the condition. He thought that the stereotyped discussion that we so often hear at the Society meeting was the reason we have so few in attendance.

As a remedy, he suggested Post-Graduate Work,—meet every week at some convenient place, and listen to a lecture upon some medical or surgical subject, by some one of our members appointed beforehand. We should pass the leadership around, so that all the members would take part. After the lecture, a general discussion should follow, with the compliments left out.

Following his advice, the Calhoun County Medical Society appointed a committee to bring about the Post-Graduate Work as outlined. Calhoun County is peculiarly constituted. There are three cities in the county, the two farthest, and largest, are twenty-six miles apart. This makes it inconvenient, and practically impossible to conduct the work as suggested. To meet this difficulty, the committee decided to have the work done in each city simultaneously. A program was adopted for the remainder of the year, twenty meetings. Each city was to select its own speakers, and have the complete program printed in one folder. Albion and Battle Creek took up the work, but Marshall having only five doctors decided to attend the meetings either in Battle Creek or Albion, either city being only thirteen miles away, and on a street car line.

In making up our program we outlined four general courses of study, each of which should be considered once a month, for five months. These courses were: 1. Anatomy and Gross Pathology. 2. Physiology and Hygiene. 3. Laboratory Diagnosis. 4. Practice of Medicine. These subjects were subdivided into five headings and assigned for the twenty weeks. In Albion every man was given a subject, as far as the men went, when they began over; thus every man knew for weeks ahead what his subject would be for a certain night, and could prepare for it. In Battle Creek we made four men responsible for the four courses, and gave them the option of having some one assist them, or take part of the work.

In Battle Creek we met Monday evenings, and in Albion Tuesdays. I do not know the method of notifing the members of the meetings in Albion, but in Battle Creek we called every man up on the telephone every Monday afternoon, to remind him of the meeting. We were so well pleased with the attendance and the work that at the conclusion of the twenty outlined subjects, we voted to have four more meetings

on assigned subjects. These four subjects were printed upon postal cards, and a card mailed to every member so that he would get it the morning of the meeting. The whole twenty-four meetings were well attended.

At the close of the first year's work we organized the Battle Creek Medical Club, as a branch of the Calhoun County Medical Society, for the purpose of conducting the Post-Graduate Work in Battle Creek.

This was in June 1903. During the same month the American Medical Association appointed Dr. John H. Blackborn, of Bowling Green, Ky., Director of Post-Graduate Work, and announced that they would publish outlines so that County Societies everywhere could pursue the work uniformly. The "Proconsul" of the A. M. A. was urging and advising the work all over the United States, and societies were asking for information and outlines of the work.

The Battle Creek Medical Club decided to hold meetings every Monday evening, except during July and August, and adopted the outline as provided by Dr. Blackborn. We met in the parlors of Nichols Memorial Hospital, which gave us a good opportunity to have clinical material presented, of which we had many and some quite rare cases. Our attendance for the past two years has averaged over fifteen every meeting, and we have had 42 meetings a year.

The question of getting the members out to meetings was solved by the postal card method, the program for each month being printed on postal cards, and mailed to every member so that they were delivered the morning of the meetings. In addition the officers urged the members every time we saw them to attend, until I fear we got to be regular bores. A program committee was appointed, consisting of the president, vice-president, secretary, and three members appointed by the president. This committee has endeavored to so arrange the program that one man will not appear a second time until all the other members have an opportunity of reading a paper. This year we have made a radical departure from the plan so far adopted, and do not know as yet what the result will be. Many had complained that we had too much "shop," so it was decided to have two nights a month assigned to members at which they could furnish any kind of a program they chose; the other two meetings to be devoted to the regular Post-Graduate Work, as outlined, two men being assigned to each night and the program for two weeks being condensed into one evening's work. The meetings with no assigned program have so far been devoted to social entertainment, or lecturers from out of town. These meetings have been the better attended ones.

Those members who for the past three and a half years have faithfully followed this work, and there are some who have not missed over half a dozen meetings during that time, have improved in many ways. Some are more given to study, and their study is better directed. Some have come to better understand and interpret laboratory work, and others have more exact and concise knowledge of medical affairs and conditions. This work has been a training-school in which many have learned how to express their thoughts on paper, and how to present them to a medical society.

So much for the history of our work in Battle Creek.

The program as proposed by the A. M. A. divides the whole subject of medicine, surgery and obstetrics into forty parts, and assigns one part to each of ten months for four years. The present year is the third of the A. M. A. outline. Each subject is then subdivided into four parts, the first having to do with the anatomy and physiology, and the others dividing the rest of the subject, as for instance, the program for the present month: The general subject for the month is "Diseases of the Stomach, Intestines, and Pancreas." The first meeting is devoted to "Surface Anatomy, Gross and Microscopical Anatomy, and Physiology of Digestion"; the second is "Acute and Chronic Gastritis, Dilatation, Cancer and Neuroses of the Stomach"; the third, "Catarrhal, Croupous, and Ulcerative Enteritis, Dysentery, Appendicitis, Intestinal Obstruction, and Entroptosis;" and the fourth meeting, "Diseases of the Pancreas."

To each man is assigned some one of the subdivisions of the subject with the request to prepare a twenty to thirty minute paper. He is supposed to review the subject and present those things that appeal to him as the most worthy. After the paper the whole subject is thrown open to general discussion. Very often the discussion is fully as interesting and equally as instructive as the paper. We have had quite a number of interesting clinical cases presented, many of our members illustrating their papers with actual cases. This has added very materially to the interest.

Many also have illustrated their papers with rough drawings such as they could make themselves. When possible, clinical cases or drawings should be demonstrated, as that helps to maintain the interest.

This Post-Graduate Work as outlined for the A. M. A. by Dr. Blackborn, is now being followed in about two hundred societies throughout the United States, one in Canada, and one in China.

SOME ETHICAL PROBLEMS OF THE COUNTY SECRETARY

By Frank Cameron Kinsey, A. M., M. D., Retiring Secretary St. Joseph Co. Medical Society, Three Rivers.

In this brief paper, I shall first say a few words about medical ethics in general, and, later, about those which more particularly affect the county secretary.

If there is any one thing about the physician which the average layman can never understand, it is his ethics. This is either regarded as among those mysterious concepts which exist, but whose "why" seems non-existent; or as a mere pose for the sake of dignity; or as pure unadulterated foolishness. And there seems, at first sight, to be some grounds for the last belief. For example, one sees practically every other line of business advertised in our daily papers. Then why not medicine? If we argue that the advertisements of physicians are more or less untrue and misleading, the obvious and just reply is, that this statement is not applicable solely to medical advertisements, for almost all advertising is exaggerated and misleading. But no one is fanatical enough to think that Mr. John Doe should not advertise the things he has for sale in his grocery store, or that Mr. Richard Roe should not increase the sale of his hardware stock by judicious advertising in spite of the exaggeration with which each of these gentlemen proclaims that he has the best goods on earth, and sells them at the lowest prices to be found on this side of the moon. The public expects a little touch of hyperbole nowadays. It adds a dash of spice which no well regulated family would care to lose. What is the harm, then, of a little exaggeration in medical advertisements also; and why should the fact that some of it is untrustworthy be used as an argument to condemn all medical advertising? The answer is, that there exists underneath the surface of things, a radical difference between these apparent similarities. When a merchant advertises his hardware or groceries, the public has several checks on his veracity. It is privileged to examine goods whose value it can estimate rather closely. It can also go the rounds of various other stores to compare quality and prices. But in medical advertisements, conditions are altogether different. One must accept or reject a physician's statements with no other evidence than his bare word. There is no possible way to estimate the quality of the services advertised. For example, when an occulist proclaims that he can cure crossed eyes without the use of the knife, he forgets to mention the scissors with which he does the work, while the glowing testimonials of those who have been cured crowd out the much greater number of complaints from dissatisfied patients. The stock in trade of these men is mystery and darkness. And the public, awed by this mystery, feels its littleness and ignorance in the presence of so profound and overwhelming wisdom.

There certainly must be a few inherited molecules of fetishism hidden away among the cerebral cells of our brains. How else can we explain the belief that a man may be a "natural born doctor" although he may be almost a fool in everything else, or the childlike faith with which the average person receives all sorts of absurd medical statements from all sorts of absurd people?

Now it is this very credulity on the part of the public—this inability to distinguish the sheep from the goats—which has brought about the present attitude of physicians with regard to advertising. Rather than compete with the advertising quack in a Marathon of selfpraise and untruthfulness, we have agreed to a dignified silence. As a result of this attitude, most intelligent people now understand that a physician who blows his own trumpet in the newspapers is thereby giving the public fair warning that he is a good man to avoid.

But the attitude of physicians toward advertising, like most other questions of medical ethics, differs in different communities. When the American Medical Association was reorganized in 1901, most ethical questions were wisely put into the hands of the county society. It was recognized that what might be necessary or desirable in cities like New York or Chicago would be utterly impossible in, say, a backwoods county of Michigan. And so it gave each county not only the power to formulate laws for itself,

but to penalize any infraction of them as it saw fit. Returning for a moment to advertising: In the larger cities no advertising whatever is permissible, while in many of the smaller country towns it has become a custom for the best physicians to have their cards in the daily papers, which has the sanction of the American Medical Association. But, even in our smallest places, the limit is reached when a man publishes his name and office hours. It is regarded as strictly *de trop*, for instance, to insert such a notice as the following, which I have clipped from a newspaper published in the county in which I reside. I am reading it only as a literary curiosity, and trust that it will tempt none of my hearers to go and do likewise.

Dr. Blowhard's Schedule of Prices

On account of the absurd reports that have been circulated regarding the prices I have been charging, and none of which have ever contained one particle of truth, I have decided to publish following schedule of prices, which I shall follow, to take effect April 9, 1909:

Visits in village (including medicine).....50c
Visits in country (2 miles or under).....$1.00
(Each additional mile 25c)
Office consultation (including medicine).....50c
Confinement cases (in village).....$5.00
Confinement cases (in country).....$6.00

Glasses properly fitted. I carry a fine line of optical goods.

Special care and attention given to confinement cases, infant feeding, surgery and diseases of women and children.

I also wish the public to know that I have no intention of leaving ———, as has been reported.

My office is on the corner opposite the courthouse, across from Mr. Thomas Greene's. I expect to remain here and give the public a square deal and value in full for their money.

Dr. G. B. BLOWHARD.

Apart from the dignified and even classical style of the above, one cannot help admiring the closing promise to give value in full for the money. A grocery store selling cabbages could not invite patronage with greater delicacy.

And now in the course of my rambles, I have at length reached my subject: the ethical problems which more particularly concern the county secretary. (I might remark, parenthetically for the benefit of the apprehensive, that the length of my proem has exceeded that of the peroration.) When one thinks the matter over for a moment, one sees that the ethical problems of the county secretary are, *ipso facto*, the ethical problems of the county society. Although, as provided by the constitution, most counties have a board of censors which is the tribunal before which ethical problems finally come for decision, nevertheless, as occurs in law, the majority of cases may be settled without ever coming to trial, through the agency of the county secretary.

This may occur in a variety of ways. A beginner in practice will sometimes, purely through ignorance, insert in the newspapers objectionable reading notices of sickness, accidents or operations. Frequently a tactful explanation from the secretary, showing the attitude of the society toward such matters, together with a little kindly advice as to his future conduct, will be worth bushels of *post factum* penalties from the board of censors. Few older physicians realize the dense ignorance in ethical matters of even the most highly educated of recent graduates. Our universities are too busy teaching the ever changing latest theories "made in Germany" to heed the practical problems of the student's future career. The consequence is that many promising young physicians make almost irreparable mistakes on the threshold of practice—mistakes which are entirely innocent as far as intent is concerned.

I remember an incident related to me several years ago by Dr. Richard Smith of Grand Rapids, which brings out this point. A most promising young man having graduated from Ann Arbor, thought he would round off his rough corners and learn to handle patients by beginning practice in a small country town. Utterly ignorant of ethics, he thought to hasten the arrival of his first patient by the distribution of some neat little handbills, announcing his arrival in the community and willingness to receive all comers. When he discovered what other physicians thought of his handbills, he did all in his power to retrieve his mistake, but without avail. He was ostracized by his professional brethren; and, even to this day, his reputation and usefulness are under the cloud of his first and only advertising. The remedy for such cases is prophylactic: early, informal, tactful and kindly remonstrance by the county secretary.

Again, questions of eligibility to membership, while officially in the hands of the board of censors for decision, are mostly so in appearance only. The secretary, by handling the correspondence, by interviews with the applicant,

by knowing all the facts of the case, has already passed judgment on the applicant and really becomes attorney for, or against, him before the board of censors, which votes in accordance with the evidence submitted.

Another ethical duty performed by the secretary is that of arbiter. One is supposed to have the ethics of his county at his finger tips, and is called upon to decide not only individual courses of procedure, but differences among physicians as well.

Again, the state secretary and the secretaries of other counties have no other first hand method of gauging a local society except by the correspondence of its secretary, and this will reflect his ethics as clearly as it does his education and cerebral capacity.

Many other minor ethical duties occur to all of us, no doubt, but the greatest of them all is the one we owe to our brother practitioners—the duty of getting worthy men into our society. Every county has men who are eligible to membership, perfectly acceptable, well educated men with high notions of honor, who are jogging along in a monotonous rut in the road of life, missing all the friendship and communion of the highest men in their profession—missing too, those little county meetings, which, humble though they be, send one out with a new interest in his profession—with a new strength for the battles of every day. Why these men are not members, no one knows. Perhaps it was the omission of some little courtesy on the part of the society, or perhaps they were never invited to join.

When a new physician comes into a county, the secretary should either call on him at the earliest opportunity, or delegate the visit to one of the most kindly and tactful of the older members of the society. It will not take long to find out whether he will be a desirable member, and a stranger in a strange land is usually appreciative of courtesies. This friendly attitude of physician toward physician should really be the keynote of our society. We are not a mob of union workmen boycotting a mob of non-union men, as some people seem to think. We have, or should have, higher motives than the little cut-throat jealousies which disgust everyone except the one who feels them. We should not be constantly on the watch for offenses and the opportunity to penalize offenders, but should seek to win them over, if possible, to a cleaner view of professionalism, to a better, more ethical way of living. And with this willingness to give everyone the benefit of the doubt, to hold the ungloved hand of friendly peace and not the steel gauntlet of bitter war, we may hope for a reciprocity among physicians, for a mental attitude toward each other which will at length enable the secretary to write after his list of all the physicians in the county, "and everyone a brother."

THE MUSKEGON-OCEANA PLAN OF MEETINGS

V. A. Chapman, M. D., Secretary Muskegon-Oceana County Medical Society, Muskegon.

The context of this paper may appear to many of you to be of a nature too trivial and elementary to be brought before this body of county secretaries.

For the Muskegon-Oceana County Medical Society, however, it has done wonders. We have held our meetings under this plan for two full years. These years have been the most successful in every way that our County Society has known.

We believe in passing good things along. As this plan is largely original with our Society and has been found by us to be good, we present it to you for your consideration in whatever part it may be found to be of benefit to you.

Briefly the plan is this: At the beginning of the year, the committee on program and scientific work, composed of the Board of Directors and President and Secretary of the Society, hold one or several meetings at which the schedule of meetings for the entire year is definitely mapped out. A list of names of the entire membership of the Society is made out in alphabetical order. From this a second arrangement of names is drawn up in the following manner:

A name is taken from the top of the alphabetically arranged list; the next name is taken from the bottom, the third name is taken from next to the top, the fourth name is taken from next to the bottom and so on, alternating between top and bottom and working towards the center of the alphabetically arranged list until the names of the entire membership are again in a second list.

Beginning at the top of this re-arranged list of names of members a date for a meeting is placed after each name, consecutively, the meetings being held every two weeks, on Friday.

A re-arrangement of names is again made in order that the meeting dates set against the

names of members residing outside of the city of Muskegon, shall be in the late spring, summer and early fall when the season is pleasant and the highways throughout the country in good condition for automobile travel.

Each member of the Society is then notified of the date which is set against his name. This is *his* date for *his* meeting. If he has any good reason why this date should be changed or any really sufficient reason why he should be excused from taking charge of a meeting during the year, he is expected to notify the committee at once or forever after hold his peace and make good when the date for his meeting arrives.

When the schedule is finally completed every member is furnished with a typewritten copy of the entire schedule. His own name and date for his meeting has a red line drawn above and below it. This is his meeting and the responsibility for the success of that meeting rests entirely upon him. He writes and reads the paper of the evening and supplies such entertainment for the Society as he cares to furnish. Extensive expenditure for entertainment is not desired nor encouraged. If a member so desires he may invite a distinguished member of the profession from outside of the local membership to give the talk or paper of the evening in his stead.

The winter meetings are held with members residing at Muskegon. The late spring, summer and early fall meetings are held with members residing outside of the city. On such occasions the city members make up automobile parties to the outlying towns. These automobile trips have been very enjoyable and are anticipated with much eagerness.

They have served to bind the profession of Muskegon and Oceana Counties together more than any other social feature we have attempted. Nothing else promotes downright good fellowship among a bunch of physicians like all getting out and pushing an automobile over a sand hill or all bending to a rope to pull the machine of an over-reckless driver out of a swamp. Nothing beats this for genuine relaxation from pills and powders and the wailings of a weary, weary world.

We have visited every part of Muskegon and Oceana Counties. We have learned of beauties and wonders of our splendid counties of which before we never dreamed.

Some of our meetings have been held at distances of thirty-five and forty-five miles from Muskegon. We have learned that some Muskegon city physicians will go forty miles to one of these meetings when they will not attend a meeting held within three city blocks of their office. We have been entertained at summer homes on the shores of peerless Muskegon Lake; taken steamboat rides on beautiful White Lake and Lake Michigan; visited the famous fruit orchards of Oceana County and feasted upon the finest fruit the sun ever shone upon.

Instead of the members petitioning to be left off the meeting schedule, every member is anxious to fill his date and to get up just a little better paper than the one which was read before. If a name is inadvertently left off the schedule that member proceeds to stir up trouble for the program committee until they arrange a date for *his* meeting.

This plan has forced us to hold meetings every two weeks instead of once a month or once in two months. Last year we had to have them weekly for a few times to get them all in. It has doubled our membership, trebled our yearly attendance and has succeeded in getting us together as nothing else ever did.

It has been the salvation of our Society.

THE RELATION OF THE COUNTY SECRETARY TO THE STATE SOCIETY

B. R. SCHENK, A. B., M. D., Retiring State Secretary, Detroit.

At the time of the reorganization of the American Medical Association and soon afterwards of our State Society, certain broad plans were adopted—in general that the county society should be the unit, that membership in the county society should carry with it, *ipso facto*, membership in the State Society, and that only members of both the county and the state could be members of the American Medical Association. This is the fundamental principle on which we are organized. At the time this plan was adopted, Dr. Simmons made the prediction that such an arrangement would greatly increase the membership of both the local and the state societies. How well this prophecy has been fulfilled is indicated in our own State, where the membership has increased from 600 to over 2,100. The plan was broadly conceived and has achieved a success far beyond, I think, the most sanguine expectations of its most enthusiastic supporters. But a number of years of administration under this broad plan have proven two things: First, that the general

scheme could not have been better conceived, and second that perfect as it is in theory, it is lacking from the administration standpoint, in uniformity. Just as one State had one set of rules as to the carrying of members two or even three years when delinquent in the payment of dues and others a different set calling for their suspension at the end of six months, so in our own State there is no exact uniformity in the county societies, as to when dues shall be paid, how long a member shall be carried when delinquent, when the State dues shall be forwarded, when the fiscal year ends, etc.

All of this lack of uniformity results in more or less confusion and a large amount of useless correspondence, with now and then a little much-to-be-deplored friction and ill feeling. With an idea of remedying these small but irritating irregularities, Dr. Simmons asked, at the Chicago meeting, for the appointment of a committee to study the existing conditions and make such recommendations as seemed best. This committee reported at Atlantic City last year and was continued and enlarged. I have the honor to be a member of the enlarged committee and we are now working out the details. When the new set of rules is adopted by the American Medical Association as recommendations to state societies, the counties of the Michigan Society should put them into effect. This committee is pretty well agreed, I think, on most of the rules to be adopted and I wish to bring some of them before you for your consideration.

(1) As to the time of the annual meeting. Some of the committee, perhaps a majority, think that all annual meetings of county societies should be held in December or January. I agree that this would be the best plan, but in certain parts of our own State, because of weather conditions, a larger meeting can be secured in the fall than in the dead of winter, so that I believe that it would be unwise to change our present customs in this respect. However, this will not interfere with the second recommendation.

(2) That the fiscal year of all county societies should correspond with the calendar year. If this is adopted it will do away entirely with the necessity of making bills and receipts read for "1909 and 1910 dues." It will simply mean that dues will be collected in advance and receipts given for the next fiscal year. A new member joining at the annual meeting in November would pay one year's dues and be credited for the next fiscal year. A new member joining after June 1st and before the annual meeting would pay half the dues for the current year.

(3) How long shall a delinquent member be carried. This is a somewhat vexing question. The method which we have employed here in Michigan has worked well. In July or August a list of all delinquents is sent to the County Secretary with the request that he attempt to get in their dues at once. This list is checked over and returned. From it a few errors, resignations and deaths are recorded. In September, after our annual meeting, a letter is sent to the individual delinquent, calling to his attention the omission, and asking him to remit to his county secretary. This has had during the past four years excellent results. In December another letter is sent, and those whose dues have not been received by December 31st are dropped and their names sent to the A. M. A. as ineligible to membership. By this method a member is carried one year and after two notices have been sent is dropped, to be reinstated on receipt of back dues. There is thus no list of suspended members. Either a man is a member or he is not. He has one year of grace, but is considered a member until the end of that year of grace. As soon as we admit in our classification a group of "suspended members" we invite confusion.

This plan, I believe, is a just one—it keeps up the membership by giving a man a year to pay—doctors are often slow but mean to be prompt— it is definite and it works. The same rule can be adopted in all county societies. It is easily understood and I think, because of its simplicity and fairness, is the ideal plan.

But the difficulty is this:—We are not supposed to send Journals after June 1st, unless the subscription has been paid. Our defense plan calls for payment by June 1st. One would think that six months instead of a year would be sufficient time to give delinquents. Perhaps it will be if the rule is adopted and our membership educated to it. Perhaps the defense feature will prove such a good collection agency as to make further consideration unnecessary. This year fully 550 paid after June 1st. To have removed them from the roll, from the mailing list, disfranchised them in the A. M. A., would mean a great deal of useless work and unnecessary expense.

Some definite plan, however, will soon be worked out and every county should adopt it, so that we shall all agree.

(4) Qualification for membership. I am con-

stantly receiving letters from county secretaries on this point. If your county society constitution does not agree with that of the State, it should be changed. The qualification in this State is now: "Every reputable and legally registered physician is eligible to membership."

(5) When shall dues be forwarded to the State Secretary? In the case of new members they should be sent immediately. Failure to do this has been the cause of more ill feeling than any other one thing. Dr. A. joins the county society after being urged and told of the advantages, etc. He sends in his application for membership in the A. M. A., together with his dues. He considers himself within the fold. He gets no State Journal, no Journal of the Association, and pretty soon a notice comes saying that his name does not appear on the certified list of the Michigan members. He writes a curt note to Dr. Simmons. Dr. Simmons writes a letter to me. I write a letter to the County Secretary. He replies and sends in the dues. I write to Dr. Simmons and to the aggrieved doctor, and Dr. Simmons writes to him and he curses the red tape of medical organization. Six letters and a half hearted member with a sore spot which takes months to heal result. Whereas if the name and dues had been sent promptly the whole thing would have been automatic and no one's feelings would have been hurt.

Dues collected from old members should be sent monthly, preferably about the 25th, as at the same time resignations, deaths, etc., may be recorded. The State office reports monthly to the A. M. A., this information. At the same time county news can be sent to the Journal with the assurance that it will appear in the next issue.

What a splendid plan it would be if each County Secretary would thus report monthly on a certain day to the State office.

Another little point. Make your check payable to the Michigan State Medical Society.

These are some of the points which concern both the county and state secretaries. The adoption of the medical defense has introduced a few changes in administration, but these, Dr. Tibbals, the Chairman of the Medico-Legal Committee, will doubtless explain.

As I tried to point out in my paper at the last meeting of this body,—the State society exists only as an aggregate body of the county societies. Hence the most important workers in the State Society are those who administer the affairs of the local associations. It is fitting then that to you should be submitted the results of your work during the past year. This data has already been read to the Council and here is repeated that you may carry away something definite as to the condition of affairs.

The Sixth Annnal Conference of the Council on Medical Education and the Fifth Annual Conference of the Committee on Medical Legislation of the American Medical Association

This meeting began on Monday, Feb. 28, 1910, at the Congress Hotel in Chicago, continuing through March 1 and 2.

The address of the Chairman, Dr. Bevan, of Chicago, was an interesting exposé of the past standards of Medical Education throughout the country. He stated that the 160 Medical Schools of six years ago had been reduced to 140 at present and declared that only 60 or 70 of these were worthy to live; that the Medical School of the future should be developed as a medical department of the university; that the preliminary education should be eight years in the primary school, four years in the high school, and at least one year in a special preparation in the premedical sciences of chemistry, physics and biology; four years in the medical school, two in the laboratories of anatomy, physiology, pathology and pharmacology; two years in clinical work in medicine, surgery. obstetrics and the specialties; and finally one year of hospital work as an interne.

He recognized the examining and licensing boards of various States as a legal board to insist on the adoption of a proper course in medicine and urged medical practitioners to support these boards by seeing to it that the public opinion was properly educated in this matter.

The Secretary's report by Dr. N. P. Colwell, of Chicago, took up the inspection of Medical Colleges. After giving something of the history of such inspection made by himself and others he closed by declaring that "The State Licensing Boards are fighting the people's battle against ignorance and incompetence, sometimes without the support either of the public or of the medical profession and they are often seriously handicapped. That some States have not already been overrun with incompetence is due entirely to the examining boards, which have found methods by which the unfit could be excluded

even with the limited authority allowed them by the legislatures. The time has come, however, when the medical profession and people of each State should see to it that a competent board of medical examiners shall control the licensing of all practitioners of medicine and that this board should be given full authority. This one barrier between the sick and afflicted and the crowds of ill-trained and incompetent practitioners must be made effective."

The afternoon session was given up to addresses of the United States Commissioner of Education, Hon. Elmer Ellsworth Brown of Washington, D. C., on "Standards on Medical Education as Related to Standards on General Education;" then "The Obligation of the University to Medical Education," by President Henry S. Pritchett of the Carnegie Foundation for Advancement of Teaching, also, "The Relation of the University to the Medical School," by President J. G. Schurman of Cornell University; and "Some of the Functions of a University Medical School," by Dr. V. C. Vaughan of Ann Arbor, Dean of the University of Michigan College of Medicine and Surgery.

These addresses will be printed in the near future in the *Journal of the American Medical Association* and are worthy of a careful reading.

The practical ideas of President Schurman will commend themselves to the thinking man in the profession.

Tuesday morning's session was occupied with Reference Committees. The report of the Committee on "Organization of a State Board on Medical Examination and License" by Dr. W. H. Sawyer of Michigan, Chairman, brought out a very lively discussion as to the possible make-up of such boards. Nothing better than what already exists in Michigan was suggested. The report of the Committee on "Qualifications of Applicants, Recognization of Medical Colleges and Standards of Examination," by Dr. S. D. Van Meter of Colorado, Chairman. Report of the Committee on the "Definition of the Practice of Medicine" by Dr. F. C. Sharp of Indiana, Chairman, went through very smoothly, but when the report of the "Standards of Preliminary and Medical Education, and what should be Incorporated in the Model Medical Practice Act," was given by Dr. Bevan of Chicago, Chairman, a host of criticisms on the report, following the discussion, were elicited. There was a very good report from the Committee on "Reciprocity and Registration," by Dr. W. T. Swarts of Rhode Island, also a report of the Committe on "Revocation of License and Penalties," by Dr. E. L. Stevens of Iowa.

In the afternoon Dr. C. A. L. Reed of Cincinnati occupied the chair, and in consideration of subjects of Medical Legislation the adresses were made by President Ernest Freund, of University of Chicago Law School, on "Some Of the Constitutional Aspects of Medical Licensure;" by Professor Roscoe Pound, of Chicago University, on "The Value of Uniform State Laws Regulating the Practice of Medicine;" by Chief Justice Olson of Municipal Court, Chicago, on "Importance to the Public of the Proper Enforcement of Medical License Laws;" by Dr. Henry B. Favill, of Chicago, on the "Attitude of the Medical Profession regarding the Medical Practice Laws." These were able, scholarly presentations of the various subjects and were all calculated to clarify the medico-legal vision of the hearer.

An attempt made to incorporate in the Model Medical Practice Act, a clause recognizing Osteopathy on the State Board, brought about a stormy discussion, the result of which was, this clause was omitted, and Osteopathy as well as Optometry must stand upon their own merits.

The Confederation of the State Boards met at the Great Northern Hotel, Thursday, March 3, Dr. Spurgeon of the Indiana Board, President, and Dr. Harison of the Michigan Board, Secretary. The address of President Spurgeon was an able paper and wide in its grasp. His recommendations showed a thorough study of the conditions and minute understandings of the situation to be met by the State Boards, some of them of an exellent practical nature and expressed the best thought for improvement in the methods of examining and licensing.

The committee to whom was referred the President's address brought in two resolutions, of much importance to the medical profession, and both were adopted unanimously. One provided for appointment by the President of a committee of seven, of which the President should be one, to take up the examination of Medical Colleges. The examinations heretofore made by Dr. Zapffe for the Association of Medical Colleges were made from the standpoint of an educator. Those made by Dr. N. P. Colwell for the Council on Medical Education of the American Medical Association were from the standpoint of that body, also made up of five leading college men. Those made by Dr. Abraham Flexner for the Carnegie Foundation were from the standpoint of the pure

scientist alone. It was felt that while these all had certain values, the really important examination was from the standpoint of the all-round practitioner in medicine. His judgment should decide whether the colleges were producing the highest type of general practitioner, and if changes were needed in teaching methods be prepared to suggest them.

The other resolution adopted was that the President should adopt a committee consisting of one from each State for the purpose of perfecting a medical practice act, and request each State governor to also appoint one member, who might be a lawyer, to be an integral part of said committee; said committee to report at our next annual meeting.

The report of the Secretary showed an extension of the work and adoption of many suggestions of the Confederation by the State Medical Boards of the country. The proposition for union of this body with the National Confederation of State Boards was received from their body through its President and was entertained by an unanimous vote. A committee of this body was appointed to co-operate with a like committee from the National Confederation with power to act. This committee will report at the next annual gathering.

As a summary the report of the Committee on Organization of a State Board on Medical Examination and License, of which Dr. Sawyer was chairman, was adopted unanimously. The report of the Committee of Qualification of Applicants, Recognition of Medical Colleges, and Standards of Examination; the report of the Committee on Standards of Preliminary and Medical Education; the report of the Committee on Reciprocity and Registration were rejected almost unanimously; on the report of the Committee on Revocation of License and Penalties no agreement was reached. All Committees' reports supported by Michigan were adopted with one opposing vote, and all reports opposed by Michigan were rejected with the same vote.

COUNTY SOCIETY NEWS

BAY

The Bay County Medical Society in February issued the first number of the *Bulletin of the Bay County Medical Society*. This is a neat little folder of eight pages, giving the programs of the meetings and many items of local interest, also a short account of the annual meeting of the County Secretaries' Association.

BERRIEN

At a meeting of the Berrien County Medical Society, held in Benton Harbor, Jan. 20, 1910, the Society voted to avail themselves of the Medical Defense Plan adopted by the State Society.

Dr. W. L. Wilson was elected local member of The Medico-Legal Committee.

The following were elected as officers for the ensuing year:

President—Dr. H. G. Bartlett, St. Joseph.

Vice-President—Dr. H. C. Hill, Benton Harbor.

Secretary—Dr. C. N. Sowers, Benton Harbor.

Treasurer—Dr. C. W. Merritt, St. Joseph.

Delegate to State Society—Dr. F. M. Kerry, Benton Harbor.

Alternate—Dr. C. W. Merritt, St. Joseph.

Meetings will be held every three months during the year. C. N. SOWERS, *Secretary.*

CALHOUN

The first quarterly meeting of the Calhoun County Medical Society for 1910 was held in the rooms of the Battle Creek Industrial Association at Battle Creek, Tuesday, March 1st, 1910.

The meeting was well attended, twenty-five being present.

Dr. J. F. Byington of Battle Creek, read a paper on "Tonsilectomy," setting forth the advantages of this newer method over the old Tonsilectomies. The paper was well rendered and ably illustrated.

Dr. Max Ballin, of Detroit gave a very comprehensive talk on the "Surgery of the Thyroid Gland." It was fully illustrated with lantern slides of especial clearness and definition.

Two applicants were accepted as members, Drs. Anna Durrie and A. A. Hoyt of Battle Creek.

Tribute was paid Dr. James M. Elliott, a member in good standing of the American Medical Association, Michigan State and Calhoun County Medical Societies and the Battle Creek Medical Club, who passed away Jan. 28th, 1910, at his home in Battle Creek.

To the Officers and Members of The Calhoun County Medical Society:

Your Committee on Necrology is grieved to report the death of our esteemed brother, Dr. James M. Elliott, which occurred after a brief illness, at his residence on Post Avenue, this city, Jan. 28th, last.

The funeral was held at Hickory Corners, his old home, a brief service being held at the residence on Post Avenue, which was attended by the Society in a body.

Dr. Elliott was present at our last meeting, and was always very regular in his attendance, and energetic in his efforts to promote the welfare of his chosen profession.

The Battle Creek Medical Club, at a meeting held subsequent to his death devoted a half-hour to his memory, and adopted the following resolutions, as a fitting expression of respect and esteem.

Whereas, Death has taken our beloved friend and fellow practitioner, Dr. Elliott, and

Whereas, We feel deeply the loss of so good a man,

Therefore, Be it resolved, that in the death of Dr. Elliott this Society has lost a valuable member, the profession an able and competent practitioner, and society a distinguished and honorable man.

Be it Further Resolved, That these resolutions be spread in the minutes of the Society, and a copy sent to the family of the deceased.

Your Committee would recommend that these resolutions be adopted by this Society, by a rising vote, and that we, as members, stand for a brief interval with bowed heads, as a token of respect for our departed brother.

Dated at Battle Creek, this first day of March, 1910.

A. F. KINGSLEY
S. K. CHURCH
H. A. HERZER
Com.

Adjournment was taken to Ceresco, June 14th, 1910.

A. S. KIMBALL, *Secretary.*

CHIPPEWA

On March 1st, the Chippewa County Medical Society held its third regular meeting for the year 1910. The following resolution was adopted by the Society in honor of the first president of the Chippewa County Medical Society, Dr. John R. Bailey of Mackinac Island. The Society requested that these resolutions be published in the JOURNAL and a copy sent his family.

IN APPRECIATION

It is with profound sorrow and a sense of great loss that we chronicle the death of a former member, and the first president of our Society, Dr. John R. Bailey, which occurred January 19th, at Fort Smith, Arkansas, where the diseased was visiting a sister. Dr. Bailey was a member of our own Society, of the A. M. A., of the Roll of Honor of the University of Michigan, an honorary member of the Michigan State Medica Society, and of the Upper Peninsula Medical Society.

Born in the profession—his father being a member—he attained an age not usually granted to one of our fraternity, that of seventy-six years.

Graduating from the Medical Department of our State University in 1854, he immediately took up the practice and was appointed Acting Assistant Surgeon in the U. S. Army, at Fort Mackinac, where he also engaged in private practice, and held the position of Indian Physician to the Chippewa and Ottawa Indians. He entered service in the Civil War as Assistant Surgeon, was soon raised to the rank of Major and Surgeon, and was chief medical officer on the staff of numerous generals of the army.

Following his activities in the Civil War, Dr. Bailey again took up his abode at Mackinac. His close identity with the life and progress of this beautiful and historically interesting place, together with his knowledge of the folk-lore of Mackinac and surrounding country, made him a part and parcel of this vicinity, and it is with great sadness that we witness the passing of this grand old man of the Straits of Mackinac.

Chippewa County Medical Society,
March 1st., 1910.

E. H. WEBSTER.
R. C. WINSLOW.

Dr. Rogers read a paper on "Modern Therapeutics" in which he took up the subjects of Psycotherapy in its various forms:—Osteopathy, Massage, Hydrotherapy and Chiropractice.

I. V. YALE, *Secretary.*

GRAND TRAVERSE

Regular Meeting, March 3, 1910.

Meeting called to order by the president. Fourteen members were present. Minutes of the last meeting read and approved.

Dr. Sara Chase read a paper on measles. Discussion opened by Dr. Moon. Dr. Lawton

discussed the seriousness of measles, stating that t was not generally recognized to be such a serious disease. He mentioned mild cases which later developed severe complications and sequelæ; such as, otitis media and lung diseases.

Dr. Lawton read a paper on scarlet fever. Dr. Thurtell opened the discussion and said that he had used diptheria anti-toxin in scarlet fever with good results, and has not yet lost a case. He stated that he uses anti-toxin in cases in which the angina is severe and generally gets early results. His cases were typical scarlet fever. Dr. Moon mentioned an epidemic in which most of the patients died, and some without a rash. All had a severe angina.

Dr. Holliday, health officer, said that twenty cases had been reported to him since October in which the children had very few symptoms and most of them felt perfectly well. Some were discovered by the school teachers. He thought that probably twenty more cases had gone unrecognized.

Dr. Wilhelm read a paper on diphtheria. Dr. Bartlett opened the discussion and said that mercury was not supposed to be used in conjunction with anti-toxin. Several of the physicians stated that they had used the two together without any ill effects. Dr. Moon said that he had had good results with Monsel's solution in stopping the spread of the membrane.

Dr. Holdsworth read a paper on complications of measles, diphtheria and scarlet fever.

Moved and supported that the Membership Committee communicate with outside physicians and attempt to get them into the Society—carried.

Moved and supported that the members of the Society be not allowed to do lodge practice—carried.

Moved and supported to adjourn—carried.

R. E. WELLS, *Secretary.*

HOUGHTON

The January meeting of the Houghton County Medical Society was held at the Douglass House, Houghton, January 3, 1910. Dr. W. P. Scott, of Houghton, presided in the absence of the President. Drs. O. E. Varieo, D. E. Gadwin, and Isodore Stearn were elected members of the Society, and the names of Drs. James Malcolm Walsh and E. O. Kruger were proposed for membership.

The retiring Secretary, Dr. John MacRae, made his report for the year 1909, showing an increase in membership from fifty-six to sixty-one and an average attendance of fifteen. The financial report showed a balance of $250.10 in the treasury.

Dr. H. H. Runonavarro, of Calumet, reported a case of leprosy, showing stains of the Bacillus Lepri and exhibiting the lesions on the face, hands and feet of his patient who was present. The case had been watched by Dr. Runonavarro for two years and at first the nature of the disease was not suspected, but when the patient reported that his mother had been sent to a leper's hospital in Sweden, a diagnosis of leprosy was made in spite of the rarity of the disease in this country. Since this time the diagnosis was confirmed by pathological and bacteriological examinations. The pathological diagnosis being made by Dr. A. S. Warthin of Ann Arbor. The progress of the disease had been practically unchecked by any treatment and the patient's appearance at this time was quite characteristic of the disease. Especial attention was called to the fact that this disease is feared to a degree quite out of proportion to its danger as a contagious disease.

After this report the annual election of officers was held. The following officers were elected:

President—Dr. John MacRae of Calumet.

Vice-President—Dr. W. H. Machette of Hancock.

Secretary-Treasurer—Dr. L. A. Farnham of Calumet.

Member of the Board of Censors—Dr. W. S. Jackson of Houghton.

Delegate to the State Medical Society—Dr. S. S. Lee of Osceola.

Alternate Delegate—Dr. J. B. Quick of Kearsarge.

It was announced that the annual banquet would be held in Calumet on January 13th at the Miscowaubic Club. After the adjournment luncheon was served. Twenty-three members were present.

L. A. FARNHAM, *Secretary.*

INGHAM

The Ingham County Medical Society has issued a very neat program, giving the dates and papers for the entire year. Those still to be given are as follows:

April 5, 1910. Functional Diseases of the Stomach. J. E. McIntyre.

April 12, 1910. The treatment of Lobar Pneumonia and some of its Complications, outside of Hospitals. Dr. Frank Smithies, Ann Arbor.
April 19, 1910. Habitual Constipation. L. Anna Ballard.
April 26, 1910. Diarrhoea. R. E. Miller.
May 3, 1910. Prophylactic Management of the Acute Infectious Diseases. F. A. Jones.
May 12, 1910. Bi-Monthly (Special Announcement).
May 17, 1910. Chronic Inflammation of the Urethra. B. M. Davey.
May 24, 1910. Cystitis. J. W. Hagadorn.
May 31, 1910. Fractures of the Shoulder Joint. H. A. Haze.
June 7, 1910. Blood Pressure. C. M. Davis.
June 14, 1910. Intestinal Worms. J. A. Humphrey.
July 14, 1910. Annual Picnic.
September 8, 1910. Bi-Monthly (Special Announcement).
September 27, 1910. Inflammations of the Conjunctiva. S. H. Jones.
October 4, 1910. Office Gynecology. Cora P. Ganung.
October 11, 1910. Minor Surgical Conditions.
(*a*) Boils.
(*b*) Ingrowing Toe Nails.
(*c*) Wounds of Skin and Muscles. C. V. Russell.
October 18, 1910. Hysteria. J. D. Heitger.
October 25, 1910. Otitis Media. C. G. Jenkins.
November 10, 1910. Annual Meeting.
November 15, 1910. Chronic Diseases of the liver. J. G. Rulison.

KALAMAZOO ACADEMY

Report of Meeting of The Kalamazoo Academy of Medicine of February 8, 1910.

After a brief business meeting the following program was carried out:

Dr. V. D. Lespinasse, of Chicago, first gave the fundamental principles of the use of Carbon Dioxide Snow in the treatment of vascular nævi. He reports this agent the most useful which has as yet appeared for this kind of skin lesions. By freezing the part from one to a dozen or more times, the blood is coagulated in the veins and later a scar-formation occurs, thus blanching the part. An area of about a half inch in diameter is the usual size treated. A bleb usually results and some swelling but these soon disappear and the area is paled. Occasionally the first treatment shows very little results, but the succeeding ones are proportionately more rapid. He reports this a safe method as under even ordinary circumstance it is rare to hear of any sloughing or other bad effects.

The simplicity of the process is the most remarkable. The snow is collected by means of a chamois skin and formed into a cone by pounding it into a mold by a mallet. The flat base of this cone is then pressed firmly against the part to be treated for about 20 seconds.

In speaking of the newer surgery of the epididimus, Dr. Lespinasse compared the vas to the fallopian tubes in the female, or to the appendix. He held that accumulations of pus in these structures cause pain in a manner similar to that in the other structures, by pressure, and that the treatment should be similar—namely, to open into the tunica either in front if general anæsthesia is given, or if none, a posterior opening would be best. He advised inserting probe or forceps to insure good drainage. He also advised making a longitudinal slit into the vas itself and injecting argyrol in from 5 per cent to 20 per cent strength.

He demonstrated some specimens of work he has done on dogs with reference to this phase of surgery.

Dr. A. E. West of Kalamazoo opened the discussion.

Dr. J. H. Crosby of Otsego gave a very interesting paper which dealt with infant feeding. The principal points mentioned were:

1. The proteid elements of cow's milk interfere very little if any with digestion, and can be taken in most any percentage.

2. Bacteria are believed to play a very small part in the causation of infantile indigestion.

3. Cream is the usual cause of the so-called "curds in the stool," being due to the saponification of the fats.

4. The principal cause of digestive disturbances of this type is in the carbohydrates and salts rather than in any of the above, and especially in the sugars. The milk sugar was believed to be most difficult of digestion; cane sugar is more easily digested, but malt sugars are best of all as they cause the least trouble. Malt soups are often best taken.

Dr. Blanche Epler of Kalamazoo opened the discussion.

Dr. W. E. Collins gave a review of the work now being reported with reference to stovaine as an anæsthetic.

The regular meeting of the Kalamazoo Acaemy of Medicine for March was held in the Academy rooms at Kalamazoo, on the 8th. The program was as follows:

1. Treatment of Gonorrhea, by Dr. A. E. West, Kalamazoo.

Discussed by Drs. Hochstein, Vaughan, Bernstein, Blach, Crane, West.

2. Diet after Abdominal Section, by Dr. J. H. Carstens, Detroit.

He recommended the giving of four quarts of water or saline solution immediately after every laparotomy by rectum. As soon as able give much liquid by mouth. If much nausea, may have to try many different expedients. Sometimes a glass of beer or a cracker will settle the stomach so that is will retain food. He believed stomach washing of value in many cases for this purpose.

He gives light diet for two or three days then increases until at the end of the first week, full diet is restored. He believes that milk is not a true liquid diet as it soon forms curds which are really solid food. Malted milk, however, is sometimes given, as is also buttermilk.

Certain exceptions to the above occur, as in stomach and bowel operations where appropriate changes should be made. After stomach operations, feed by rectum for five days, then begin by giving two ounces at a feeding. Use no enemas after operations on large bowel.

He advocated the use of morphine, but took a medium ground by saying that just enough to deaden pain should be used and no more; ⅛ gr. doses being the usual day dose and ¼ gr. at night, so as to produce sleep. He said that large doses have done great injury to many patients.

He advocated strongly the use of eserine salicylate after operations. Alcoholics are used very little, though at times may stop nausea. Summary—

(1) Give only liquid food for 48 hours.
(2) Light diet until end of first week.
(3) Full diet at end of first week.
(4) *Give unlimited amount of liquid.*

The paper was discussed by Drs. Hochstein, Clark, Boys, Butler, Balch, Crane and Carstens.

3. Diagnostic and Prognostic Importance of Eye-fundus Lesions in Nephritis, with especial reference to that of Pregnancy. Dr. E. J. Bernstein, Kalamazoo.

Discussed by Drs. Jackson and Bernstein.

After the program, Dr. Carstens gave an informal talk upon the growth of the State Society and its usefulness to practitioners. He mentioned the defense now given by the State Society and commended it very highly, saying that it alone "was worth the price of admission." He spoke of the coming duty of the physician to teach moral lessons as he has not done in the past, suggesting that the physician has an opportunity for this better than anyone else, not excluding the ministers.

He entered a plea for better education concerning cancer among the laity.

C. E. BOYS, *Secretary.*

MENOMINEE

Following is the program for the Marinette and Menominee County Medical Society for the remainder of the year.

April 13.—*Menominee.*

Dr. E. Sawbridge
Dr. W. R. Hicks
Dr. H. F. Schroeder } Gonorrhea in Women

Dr. A. F. Lyon-Campbell—Midwifery in Private Practice.

May 11.—*Marinette.*

Dr. A. T. Nadeau—Gastric Ulcer.
Dr. J. F. Hicks—Chronic Gastritis.
Dr. D. R. Landsborough—Gastric Carcinoma.
Dr. R. A. Walker—Biliary Infections.

June 8—*Menominee.*

Dr. P. J. Noer—Contract Practice.

Dr. C. C. Stevens—Differentiation of Epithelia as found in Pathological Urine, as an Aid in the Diagnosis of Genito-Urinary Diseases.

Dr. H. R. Adams—Pneumonia in Children.

September 14.—*Marinette.*

Dr. E. V. McComb—The Management of Local Infections.

Dr. H. T. Sethyne—The Treatment of Tuberculosis with especial reference to Tuberculin.

October 12—*Menominee.*

Dr. E. E. Axtell—Mastoiditis.
Dr. E. Grignon—Puerperal Sepsis.
Dr. M. D. Bird—Septic Peritonitis.

November 9.—*Marinette.*

Dr. B. T. Phillips—General Management of Infectious Diseases.

Dr. T. A. Lid—Scarlatina.
Dr. S. Berglund—Diptheria.

Dr. A. B. Cotnoir—Acute Articular Rheumatism.

Dr. A. J. Marquis—Variola.

December 14.—*Menominee.*

Dr. H. F. Schroeder—Abortion.
Dr. H. A. Vennema—Chronic Appendicitis.
Dr. J. V. May—To be announced.
Dr. E. V. McComb—Internal Hemorrhage.

C. R. ELWOOD, *Secretary.*

MONTCALM

At our last meeting we had the largest attendance we have known for a long time.

We had with us our Councilor, Dr. W. T. Dodge, of Big Rapids, who read an interesting paper on "Some Phases of Chronic Disease of the Stomach, Duodenum, Gall Bladder and Appendix." (Published in this issue of the JOURNAL.—EDITOR.)

The subject for consideration at the meeting was "Variola." Four papers were read on the same by Drs. Kelsey, Highfield, Danforth and Penton. These papers were well discussed by all present.

Dr. W. H. Belknap was elected delegate to the State meeting in Bay City, with Dr. A. W. Martin, of Howard City as alternate.

The officers of our Society for 1910 are:

President Emeritus—Dr. John Avery, Greenville.

President—Dr. F. R. Blanchard, Lakeview.

First Vice-President—Dr. J. O'Dell Nelson, Howard City.

Second Vice-President—Dr. E. M. Highfield, Edmore.

Third Vice-President—Dr. W. H. Belknap, Greenville.

Fourth Vice-President—Dr. Walter A. Lee, Sheridan.

Secretary and Treasurer—Dr. H. L. Bower, Greenville.

H. L. BOWER, *Secretary.*

MUSKEGON-OCEANA

The meetings of our Society for 1910 have been started a little later in the year than usual. Several causes have combined to postpone the work of getting out the schedule for 1910. Your Secretary's candidacy regarding the secretaryship of the Michigan State Medical Society, which was taken up early in the year, took up considerable time early in January.

Your Secretary, herewith, wishes to thank the members of the Muskegon-Oceana County Medical Society, and especially the President and Board of Directors and Dr. George S. Williams, Chairman of the Board of Directors, for their kindly interest and work done in an effort to make this candidacy successful.

The office of Secretary-Editor of the Michigan State Medical Society and Journal was not brought to Muskegon. No "sore spots" need be felt by anyone, however, regarding this matter.

Dr. George S. Williams, Chairman of your Board of Directors, and your Secretary, were at Detroit in attedance upon the meetings of the Council, January 12th and 13th, and the meeting of the Association of County Medical Society Secretaries of the State of Michigan, on the 13th. These meetings were very interesting and enjoyable in every way. Many points of interest were brought up and discussed thoroughly. The discussion of the Medical Defense Plan was entered into thoroughly and many points pro and con were brought up. Dr. Williams, your representative upon the Medico-Legal Committee, was present at the discussion and no doubt gained much information concerning the Medical Defense Plan. I believe it would be very interesting and beneficial to have a talk from Dr. Williams before the Society on this subject.

All of the meetings at Detroit above referred to, were full of vim and good fellowship. A spirit of fairness and intense interest was manifest throughout.

Dr. Wilfrid Haughey of Battle Creek was elected Secretary-Editor. Dr. G. F. Inch of Kalamazoo was elected Treasurer. The councilors' vote for Secretary-Editor, so far as the writer knows, was as follows: The first ballot, Dr. Wilfrid Haughey of Battle Creek, 4; Dr. Rich of Detroit, 2; Dr. Conboy of Bad Axe, 2; Dr. Warnshuis of Grand Rapids, 1; Dr. Chapman of Muskegon 2. Second ballot, Dr. Wilfrid Haughey of Battle Creek, 8; Dr. Chapman of Muskegon, 2. Dr. Haughey is an eminently capable young man and it is very certain that the office of the Secretary-Editor is well filled.

Your Secretary was elected President of the County Medical Society Secretaries Association of Michigan.

The schedule for meetings for 1910 is outlined as below given.

Each member is expected to give a paper upon some subject of his own selection, or exercise his privilege of inviting in some member of the profession from outside our counties to give a paper in his stead. Each member is requested to select two other members to open a discussion of his paper. Please notify the Secretary of the subject of the paper and names of members

who will open discussions at least one week in advance of date of meeting.

No member s expected to go to any extensive expense in providing entertainment for the Society, at these meetings. The entertainment feature is purely optional.

The train service on the Pere Marquette is now such as to permit of a scant hour's time in Muskegon between the afternoon trains. Your Vice-President, Dr. Griffin of Shelby, and the Board of Directors, after discussing this matter, decided to omit the afternoon meetings feature, as the time would not be sufficient to permit of an afternoon meeting between trains. All the meetings, therefore, will be held evenings.

The first meeting of the year was held with Dr. W. A. Campbell at Muskegon, with an attendance of seventeen members.

The next meeting will be held Friday evening, March 4, with Dr. V. A. Chapman at Muskegon, at his residence, 215 Terrace St. Take the Pine St. car and get off at Isabella St. It is necessary to call this meeting a little early. Dinner will be served at 7 o'clock. The meeting for business and scientific program will be taken up following dinner.

Your Secretary will appreciate it very much if each member expecting to be present at dinner will notify him as soon as possible.

Dr. Chapman will read a paper upon "Osteoma of the Frontal Sinus," with report of a case. Dr. Eames will talk upon the same subject from the pathologist's point of view.

Some business is to be transacted. The delegate and alternate delegate for 1910 should be elected. A large attendance would be very gratifying.

Out of town members will be taken care of and started home early Saturday morning, in good time and condition for the day's business.

1910

February 19—Dr. W. A. Campbell, at Muskegon.
March 4—Dr. V. A. Chapman, at Muskegon.
March 18—Dr. George S. Williams, at Muskegon.
April 1—Dr. J. T. Cramer, at Muskegon.
April 15—Dr. John VanderLaan, at Muskegon.
April 29—Dr. R. G. Cavanagh, at Muskegon.
May 13—Dr. A. A. Smith, at Muskegon.
May 27—Dr. J. D. Buskirk, at Shelby.
June 3—Dr. Charles F. Smith, at Whitehall.
June 17—Dr. V. J. Blanchette, at Walkerville.
July 1—Dr. G. F. Lamb, at Pentwater.
July 15—Dr. J. H. Nicholson, at Hart.
July 29—Dr. B. F. Black, at Holton.
August 12—Dr. W. E. Dockry, at Pentwater.
August 26—Dr. L. P. Munger, at Hart.
September 9—Dr. S. J. Drummond, at Casmovia.
September 23—Dr. J. M. VanderVen, at New Era.
October 7—Dr. W. L. Griffin, at Shelby.
October 21—Dr. L. W. Keyes, at Whitehall.
November 4—Dr. C. P. Donelson, at Muskegon.
November 18—Dr. P. A. Quick, at Muskegon.
December 2—Dr. L. N. Eames, at Muskegon.
December 16—Dr. F. B. Marshall, at Muskegon.

1911

January 6—Dr. P. J. Sullivan, at Muskegon.
January 20—Dr. W. P. Gamber, at Muskegon.
February 3—Dr. L. I. Powers, at Muskegon.
February 17—Dr. F. W. Garber, at Muskegon.
March 3—Dr. Jacob Oosting, at Muskegon.
March 17—Dr. G. J. Hartman, at Muskegon.
March 31—Dr. R. G. Olson, at Muskegon Heights.
April 14—Dr. I. M. J. Hotvedt, at Muskegon.
April 28—Dr. J. F. Denslow, at Muskegon.

The regular meeting of the Muskegon-Oceana County Medical Society was held at the residence of Dr. V. A. Chapman, at Muskegon, Friday evening, March 4th, 1910.

The members present were Doctors J. F. Denslow, P. A. Quick, Jacob Oosting, George S. Williams, A. A. Smith, R. G. Olson, P. J. Sullivan, F. B. Marshall, L. N. Eames, W. E. Dockry, L. I. Powers, W. P. Gamber, I. M. J. Hotvedt, J. T. Cramer, C. P. Donelson, and V. A. Chapman.

Following seven o'clock dinner, the regular business and scientific work of the Society was taken up. Dr. F. B. Marshall of Muskegon, Michigan, was elected delegate of this Society to the meeting of the Michigan State Medical Society for 1910. Dr. W. E. Dockry of Pentwater was elected alternate delegate. Dr. H. W. Hatch of Hart was elected to honorary membership of this Society.

Dr. Chapman read a paper upon "Osteoma of the Frontal Sinus," presenting a clinical case from which he had removed a large osteoma of the frontal sinus, which required taking away the major portion of the anterior table of the frontal bone and nasal bones and roof of the



ROBERT LE BARRON, M. D.

right orbit. The specimen removed was presented before the Society. Dr. Eames followed with a paper upon the same subject from the pathologist's standpoint. The papers were quite generally discussed.

Meeting adjourned to meet in two weeks with Dr. George S. Williams, at Muskegon, Michigan.

Very truly yours,

V. A. CHAPMAN, *Secy.*

OAKLAND

The regular March meeting of the Oakland County Medical Society was held in the beautiful rooms of the Court House at Pontiac on March 3, 1910.

At this time the Society had planned to give a complimentary banquet to Dr. Robert LeBarron, to mark the close of a half century of active work in the practice of the healing act. These meetings serve for much good to the County Society, as all who attended were convinced. Among those present as guesets of Dr. LeBarron were Drs. W. F. Breakey of Ann Arbor, I. S. Townsend of Detroit, and C. B. Burr of Flint. As guests of the Society, Dr. J. H. Carstens of Detroit, President of the Michigan State Medical Society, Dr. Wilfrid Haughey of Battle Creek, Secretary of the State Society, and Dr. A. P. Biddle of Detroit, Councilor for the First District.

Dr. Carstens responded to the toast, "The Value of the Medical Societies," in which he gave a very beautiful word picture of how the whole populace could be educated and swayed by the energies of an honest doctor in teaching his people how to live; and that through organization he would be made stronger himself and better fitted as a teacher; that the doctor was closer to the hearts of his people than any other man; therefore, more potent in the community for good than were the theologian, lawyer, or general. The Doctor strongly recommended mutual fellowship among physicians.

Dr. W. F. Breakey paid some very pleasing tributes to his old classmate, Dr. LeBarron, and wished for him many years of usefulness.

Dr. E. A. Christian of the Eastern Michigan Asylum responded to "The Guest of Honor," in which he very nicely called to our minds the difference in the armamentarium of the physician of today, and of fifty years ago, when our guest started to practice, also that the Doctor had kept apace with the changes of equipment, still holding his honored place among the fellow practitioners.

Dr. Wilfrid Haughey, of Battle Creek, secretary of the State Medical Society and editor of the State Medical Journal, spoke of the immense amount of good the state organ was doing and said that its subscription list had grown until it was now necessary to print 2500 copies. He urged the county societies to contribute to its columns as often as possible.

Dr. C. B. Burr, of Flint, eulogized the Doctor and gave some very pert remarks on the life and doings of Dr. LeBarron as he remembered him for the last thirty years.

Dr. A. P. Biddle responded to "The Physician Himself, His Responsibility to the General Profession," that it is every man's duty to do all he can to raise the standard of the profession, throwing aside little personal matters and bending every honest effort to maintain and improve the Societies, County, State and National, even though he can not approve personally of each and everything done as a Society. After which Dr. LeBarron responded to "Reminiscences," giving an account of his professional life and thanking the Society for thus honoring him; stating that this would be a red letter day in his memory.

J. T. BIRD, *Secretary.*

ONTONAGON

At a meeting of the Ontonagon County Medical Society held in the village of Ontonagon, February 24, 1910, the following officers were elected:

President—W. B. Hanna of Mass City.

Vice-President—C. L. Rumph of Rockland.

Secretary-Treasurer—J. S. Nitterauer of Ontonagon.

Dr. C. L. Rumph gave a very interesting report of a case of leprosy with pictures of the case.

J. S. NITTERAUER, *Secretary.*

OTTAWA

The February meeting of the Ottawa County Medical Society was held at the Council rooms, Holland, February 8, 1910. The meeting was well attended. Dr. R. J. Walker, of Saugatuck, read a paper on "Diagnosis and Treatment of Diabetes." Dr. Walker presented nothing new in regard to the diagnosis of diabetes, but ventured the opinion that the disease is more prevalent than commonly supposed; as in his opinion it occurs with great frequency in children where a diagnosis is seldom made.

In the treatment of diabetes he was strongly

of the opinion that the first essential was to nourish and preserve the strength of the patient.

If this can be accomplished by a strictly diabetic diet, well and good, but if not, then resort to a more palatable and liberal diet.

The medicinal treatment given was symptomatic, and the various so-called specifics, as forms of opium, arsenic, and proprietary articles, were given scanty consideration. The use of Gluten flour was merely mentioned to be condemned. The rigid diet lists as published in our text-books, and considered necessary in our treatment of diabetes, were given a rude shock, both by the author and those participating in the discussion of the paper.

Dr. Rowe, of Grand Rapids, opened the discussion by giving the premonitory and subjective symptoms of his case of diabetes occurring in himself. He also described the manner in which he made an accidental diagnosis, and gave the subsequent course and treatment. He agreed with Dr. Walker, as did nearly all of those participating in the discussion, that a rigid sugar-free diet shortened the duration of the disease by shortening the life of the patient.

Dr. D. G. Cook, of Holland, read a paper on "Diseases of the Gall-Bladder," and presented his subject in three sections. He read extracts from the paper on "Gall-Bladder Diseases and Pancreatitis," by Dr. J. H. Carstens, of Detroit, and followed this by reading an original review of the subject and reporting several cases. The Doctor presented a very interesting case of gall-bladder infection, with a marked jaundice, for inspection and diagnosis. The patient was examined by many of those present. After the patient had retired, he gave a practical demonstration of the Mayo operation for gall stones and gall-bladder drainage, using for this purpose a large beef liver and gall-bladder.

The only treatment offered for diseases of the gall-bladder was operative. Even in cases of infection without stones he earnestly recommended drainage as the only hope of recovery. Dr. Cook presented his subject in a painstaking manner, and at considerable trouble to himself, but his efforts were greatly appreciated by those present. It was the most practical presentation of a subject ever given before the Society.

SCHOOLCRAFT

Dr. Frank Rainie, of Manistique, is spending the winter in California. He proposes doing some special work in the hospitals of Los Angeles.

At the regular meeting of the Schoolcraft County Medical Society, held in Manistique, on Feb. 2d, Dr. G. M. Livingston of Manistique, was elected delegate to the State Society meeting at Bay City and Dr. J. W. Saunders alternate.

Dr. Stephen A. Gates of Cusino, is taking a short vacation in Detroit.

Dr. John M. Lipson has sold his drug store and practice at Germfask and is now located at Gould City, where he succeeds Dr. J. W. Saunders.

This Society at its last meeting adopted resolutions unanimoulsy indorsing Hon. Chase S. Osborn, of Sault Ste. Marie, for next governor.

G. M. LIVINGSTON, *Secretary.*

SHIAWASSEE

The February meeting of the Shiawassee County Medical Society was held on Tuesday, February 8, in the parlors of the Armory, but owing to snowdrifted roads, etc., the attendance was small. However, it was decided to appoint a physician in each district, as a committee of one, to look into the necessity and advisability of establishing a County Fee Bill. On Tuesday, March the 8th, this committee will meet as a whole and take some action on the matter. Later in the afternoon a general session of the Society will be called and resolutions submitted. After this there will be a banquet at the Hotel Wildermuth.

Dr. Geo. B. Goss of Bancroft is spending some weeks in Chicago.

As previously agreed upon the March meeting of the Shiawassee County Medical Society, held at the Armory in Owosso, Mich., March 8th, was given over to the consideration of a fee-bill.

At a previous meeting, one physician in each village and district in the county was selected to ascertain the sentiment in his vicinity, as to the advisability of adopting a uniform fee-bill; this committee met and arranged suggestions which were submitted to the County Society.

The meeting of the Society was well attended, and great interest manifested in the solving of this knotty problem. Naturally, during the discussion of the subject, many interesting phases of the situation were brought out. The consensus of opinion was that the fees in the rural districts were generally too low, and should be raised.

It became clear to all that in order to accomplish results along these lines it was necessary that each physician should not only stand by the fee-bill adopted, but that he must educate his people and patrons in their business relations

to their physician, as well as their professional relations; that in view of the greatly increased cost of preparation of the qualified physician, as well as increased cost of maintenance, the physician is no longer only a day laborer.

While nearly all members of this Society are loyal to the best interests of the profession, the question arose as to the treatment of the occasional one who undervalues his service. Though the question may be still represented by an interrogation point, the sentiment seemed to favor a patient attempt at education of the doctor, instead of coercion.

Several items of the fee-bill were thoroughly considered and tentatively adopted, and at a subsequent meeting the work of completing and adopting as a whole will be taken up, with every prospect of harmonious action thereon.

After adjournment the members of the Society enjoyed a dinner and smoker at the Hotel Wildermuth.

H. A. HUME, *Secretary.*

TUSCOLA

The Tuscola County Medical Society met at Caro, Feb. 14, with an attendance of eighteen.

A case of appendicitis which simulated ruptured kidney, occurring in the practice of Dr. Bishop of Millington, was reported. An appendiceal abscess had formed in the retroperitoneal cellular tissue which opened the ureter and some small blood vessels causing the formation of a large urinous hematoma such as would be formed by a rupture of the kidney. The history of injury from a kick and a fall gave weight to such a diagnosis. The hematoma was first drained by free incision over the kidney and five days later the kidney was removed, but the patient died a few hours later. An autopsy revealed the true nature of the disease.

Dr. Edward W. Mooney of Detroit read a paper, "Simple, Exophthalmic and Congenital Goitre," and Dr. W. M. Donald, also of Detroit, read one, "Hyperchlorhydria with Special Reference to the Differential Diagnosis."

Both papers were favorably discussed.

W. C. GARVIN, *Secretary.*

Dr. F. D. Smith of Coopersville has been confined to the house for several weeks with Sciatic Rheumatism.

NEWS

Dr. O. C. Breitenbach, Director of the Escanaba Municipal Laboratory, has been appointed as the Escanaba representative of the State Board of Health, on the Regulation of the Public Water Supply. This appointment comes to Dr. Breitenbach not only by virtue of his office as Director of the Municipal Laboratory but in recognition of his valuable work in securing purer water and better sanitary conditions in Escanaba.

Dr. R. A. C. Wollenberg, who has been very active in the United States marine hospital service the past five years, has resigned his commission and returned to Detroit to take up practice. He will be associated with Dr. Andrew P. Biddle, at No. 57 Fort St., West, making a specialty of skin diseases, to the study of which both physicians have given much time.

Dr. Wollenberg came to Detroit with his parents when an infant, After receiving an early education in the public schools he attended the University of Michigan, later going to the University of Georgetown from which he received his medical degree. Immediately after graduating he entered the marine hospital service and was stationed in Detroit Marine Hospital for over one year as interne and remained two years longer on special duty, then was transferred to New York to Ellis Island, going from that port to Naples, Italy, as special immigration inspector for the United States government of all immigration leaving the Mediterranean.

While stationed in Naples, Dr. Wollenberg's duties took him all over Italy and he gained an extensive experience in many branches of his profession as well as of the immigration service. Among his most notable achievements in this respect was the study he made of pellagra, his findings on this subject forming an official report to the United States Government. Dr. Wollenberg fulfilled a similar duty for his home government in a special investigation of cholera when that plague raged in Rotterdam a couple of years ago. During the Italian earthquake disaster, Dr. Wollenberg was in charge of one of the several general hospitals placed at the disposal of the earthquake refugees by the government. Dr. Wollenberg left Naples last October and upon his arrival in the United States was sent at once to San Francisco. While in

the California city he decided to give up the service and return to Detroit to make his home. Mrs. Wollenberg is a Detroit girl and they have a family of three children. They will make their home at No. 2331 Woodward Ave.

February 25, 1910, Dr. A. W. Alvord of Battle Creek, gave a four course supper at his residence on Wendell St., to about twenty-five of his brother practitioners. The evening was very enjoyably spent in getting better acquainted with each other. This is the third of these social gatherings of the Battle Creek physicians. The first being given by Dr. M. A. Mortensen at the Sanitarium; the second by Dr. T. E. Sands at his home on Van Buren St.

These gatherings, together with several social gatherings held by the Battle Creek Medical Club at their rooms, have served to engender a strong feeling of fellowship among those attending.

Born February 25th to Dr. and Mrs. R. M. Gubbins of Ceresco, a son, Robert Merrick Gubbins Jr.

Monday March 7, about twenty-five members of the Battle Creek Medical Club met at Luncheon and spent a very enjoyable evening talking over various topics which were not "shop."

Dr. A. Leenhouts of Holland, attended the Auto Show in Chicago. The Doctor is one of our auto-enthusiasts.

A large number of medical friends of Dr. T. G. Huizinga, surprised him at his home in Zeeland, Feb. 7. The occasion being the 50th anniversary of his birth. Dr. Huizinga graduated from the University of Michigan in 1881, and has practiced medicine, in his present location in Zeeland, twenty-nine years.

Dr. B. B. Godfrey of Holland, in a few well chosen words, presented to Dr. Huizinga a gold cane as a token of the esteem and appreciation in which he is held by his medical friends in this county. Mrs. F. J. Schouten presented to Mrs. Huizinga a beautiful hand-painted vase as a momento of the occasion from the ladies present. Dr. and Mrs. Huizinga responded in a fitting manner. At the close of a very pleasant evening, refreshments were served, and the guests departed to their homes with a feeling of satisfaction at having done honor to a man who has so completely fulfilled the modern injunction, "Be good and make good."

The plans for the New Detroit General Hospital are nearly completed by the architects, Stratton and Baldwin of Detroit. They will be submitted to several hospital authorities in Cincinnati, New York and Boston as well as in Europe. Mr. Stratton, accompanied by Dr. W. F. Metcalf and Dr. H. E. Safford sailed February 16th, with the intention of visiting all of the well known hospitals of England, Ireland and the Continent.

New Registration Report by the Michigan State Board of Registration in Medicine

Martin Samuel Dubpernell, Detroit, Mich. Med. Dept. University of Louisville, Ky., 1909. Reciprocity Qualification I with Kentucky, Date of License, 1–19–'10.

Wm. T. S. Vincent, Grand Rapids. Med. Coll. of Ohio, 1889. Reciprocity Qualification I with Georgia, Date of License, 2–16–'10.

Carl Ridge Meloy, Detroit, Mich. Med. Dept. Johns Hopkins Univ., Md., 1906. Reciprocity Qualification I Virginia, 1–27–'10.

Wm. W. Root, Detroit, Mich. Rush Med. College, Chicago, 1904. Reciprocity Qualification I with Illinois, 3–4–'10.

Lee E. Grant, Detroit, Mich. Kentucky School of Medicine, 1902. Reciprocity Qualification I with Indiana, Date of License, 3–4–'10.

Those of our readers who are interested in the various forms of Physiologic Therapeutics (including Hydrotherapy, Electrotherapy, Massage, Hyperemia, etc.) will be glad to know that it is proposed to shortly inaugurate a new journal devoted solely to the delineation of the progress made in these lines of therapeutic endeavor.

The American Journal of Physiologic Therapeutics will be published bi-monthly and the subscription price will be $1.00 a year. The names and addresses of all interested physicians should be sent in, and those desirous of subscribing at once may enclose their remittance when writing. It is to be hoped that a wide-spread interest may be aroused in this matter. *The American Journal of Physiologic Therapeutics*, 72 Madison Street, Chicago.

The annual meeting of the Ohio State Medical

Association will be held in Toledo on the days of the 11th, 12th and 13th of May, 1910. The Committee on Arrangements already have the work well under way, and Exhibitors desiring space at the Hotel Secor may address their communications in care of Dr. George Chapman, Toledo, Ohio. Everything is being done to make this meeting the most successful one ever held in the State.

The 60th Annual meeting of the Illinois State Medical Society will be held in Danville, May 17th, 18th and 19th, 1910. This is to be the banner meeting. The entire membership of Vermillion County Medical Society extends to you a personal and very cordial invitation to attend. In this they are joined by the Commercial Club, the Hundred Thousand Club, the Mayor, the financial, industrial and business interests of the city.

Extracts from a report of the Health Officer of Manistee.

In 1907 twenty-eight cases of tuberculosis were reported to the city health officer. In 1908 the number dropped to sixteen. And last year there were only ten cases reported.

The death reports corroborate these figures.

In 1907 there were eighteen deaths from pulmonary tuberculosis, and three from other forms of the disease.

In 1908 there were eighteen deaths from pulmonary tuberculosis, and four from other forms, but in 1909 the deaths fell to nine for tuberculosis of the lungs and one from tuberculosis in other organs.

In three years reported cases fell from twenty-eight to ten, and deaths from twenty-one to ten.

The Society of Medical History of Chicago has been recently organized, with Dr. Isaac N. Danforth as president, Dr. N. S. Davis as vice-president, and Dr. George H. Weaver as secretary. Its council consists of Dr. Ludvig Hektoen, Dr. George H. Weaver, Dr. John Edwin Rhodes, Dr. N. S. Davis, Dr. Henry T. Byford, and Dr. Geo. Henry Cleveland.

The Society has been formed for the purpose of systematically collecting and permanently preserving in an accessible manner any matters which are or will become of interest in connection with the medical history of institutions, organizations, and individuals, especially of Chicago and the surrounding States.

Everything collected by the Society will, as soon as possible, be so arranged as to be accessible to any person doing research work in medical history. Gifts to the Society will be duly credited to the donors.

All communications should be sent to Dr. Geo. H. Weaver, Secretary, 1743 West Harrison street, Chicago.

COMMUNICATIONS

To the secretary of each State and County Medical Society and other interested members:

At the last meeting of the American Medical Association at Atlantic City, the following report of Committee on Miscellaneous Business was adopted: "The Committee recommends that the President of this Association appoint a committee of five members to inquire into the desirability and practicability of establishing under the auspices of the American Medical Association a fund for the assistance of physicians disabled by sickness, and for a sanatorium for the treatment of such members of the Association as may be afflicted with tuberculosis or similar diseases; such committee to report to the House of Delegates at the next annual meeting of the Association."

As a basis for wise action the Committee urges that the officers of the State and County Medical Societies, and others interested in the subject, should at the earliest possible date, forward to the Secretary of the Committee, Dr. A. C. Magruder, Colorado Springs, Colorado, answers to the following queries, with some account of any special cases that seem to illustrate the need of providing for disabled members of our profession.

1. Is there any provision by your State Medical Society, or local Society, for the care of destitute and disabled physicians and those dependent upon them? If so, how is such care provided?

2. What number of instances of special need for such assistance (or sanatorium treatment) have arisen in your locality within the last five years and what number of your members need such assistance now?

3. About how many members of your County Medical Society are at present afflicted with tuberculosis or similar diseases, or have,

within the last five years died, or withdrawn from professional work on account of such disease?

It is earnestly requested that this matter be brought before each State and County Society at its next regular meeting and that the desired information be furnished our Committee at the earliest possible date.

Fraternally yours,

EDWARD JACKSON, Denver, Colo.
JEFFERSON R. KEAN, Washington, D. C.
A. T. BRISTOW, Brooklyn, N. Y.
H. B. ELLIS, Los Angeles, Cal.
A. C. MAGRUDER, *Secretary*,
305 N. Tejon St., Colorado Springs, Colo.

Washington, D. C., Feb. 10, '10.

To the Medical and Pharmaceutical Press:

At a regular meeting of the Board of Trustees of the United States Pharmacopœial Convention held at Columbus, Ohio, Jan. 28 and 29, 1910, it was resolved, five members of the Board of Trustees assenting thereto, to submit to the next meeting of the United States Pharmacopœial Convention (Incorporated) the following propositions to amend the Constitution of the convention in the following particulars:

(I) To amend Section 2, Article II, relating to membership, by inserting after the title "the Surgeon-General of the United States Marine Hospital Service," the following: "The Secretary of Agriculture, the Secretary of Commerce and Labor, the Association of Official Agricultural Chemists, and Association of State and National Food and Dairy Department, the National Wholesale Druggists' Association and the National Dental Association."

(II) Also to amend said Section 2, Article II, by changing the words "three delegates" in line eleven (page seven of the reprint of the Constitution and By-Laws of 1909) to "one delegate"; the effect of this change being to reduce the representation of each organized body and department to one delegate each.

(III) Also to amend article IV, concerning "Committees and Trustees", by changing the title "Committee of Revision," to that of "General Committee of Revision" (Ibid. last line.)

The Constitution does not require notice to be given of proposed changes in the By-Laws of the Convention, but to make clear the purpose of the change proposed in the present title of the Committee of Revision, it is hereby announced that the Board of Trustees will submit to the Convention propositions to amend the By-Laws as follows: To increase the number of members on the Committee of Revision, hereafter to be known as the "General Committee of Revision" from twenty-five to fifty, said General Committee of Revision to create from its own membership an Executive Committee of Revision of fifteen members, to have immediate charge of the work of revision, and also giving to said General Committee of Revision certain advisory and supervisory powers over the work of the Executive Committee of Revision.

MURRAY GALT MOTTER, *Secretary*.

BOOK NOTICES

Preparatory and After Treatment in Operative Cases, by Herman A. Haubold, M. D., Clinical Professor in Surgery and Demonstrator of Operative Surgery, New York University and Bellevue Hospital Medical College, New York; Visiting Surgeon Harlem and New York Red Cross Hospitals, New York, etc. With four hundred and twenty-nine illustrations. New York and London, D. Appleton & Co. Cloth, net $6.00.

We have for a long time looked for a work of this character and certainly the writing of it could not have been entrusted to better hands. From the introduction to the final chapters on skin grafting nothing that makes for the scientific preparation and care of the patient has been omitted. The introduction is a departure from the ordinary and frankly tells the practitioner what the work is, and how it benefits him. Grouped under general consideration is found the surgical bearings of such complications as Syphilis, Tuberculosis, Obesity, Drugs, etc. Minute attention is given to the preparation of all things relating to the operation, from room to bandage, from assistant to instrument, from surgeon to patient, nothing is omitted, everything explained. The after-treatment is equally well handled. To shock and hemorrhage is devoted an entire chapter. Attention is given to post-operative vomiting, thirst, pain, dressing, removal of stitches, and the adjustment of artificial limbs. The all-important art of feeding is considered at length and in a masterful way. Finally the book is written in narrative style, though each subject has a separate caption. It occupies an unique place in the medical library, a place that has previously been empty. Within its six hundred and fifty pages is grouped a fund of practical information not found else-

where. Entire libraries may be searched in vain for what this book contains. As a reference book in an emergency it is a gem. It contains more than four hundred illustrations. The index is perfect. It should be welcomed by all and is indispensable to any that refer operative patients.

Saunders Illustrated Catalogue.

W. B. Saunders Company, the medical publishers of Philadelphia and London, have just issued a new edition—the thirteenth—of their handsome Illustrated Catalogue. It contains some twenty new books and new editions, and besides numerous black-and-white illustrations there are two color cuts of special value. We strongly advise every physician to obtain a copy —sent for the asking. It will prove a ready guide to good medical books—books that we all need n our daily work.

Renal, Ureteral, Perineal and Adrenal Tumors and Actinomycosis and Echinococcus of the Kidney. By Edgar Garceau, M. D., Visiting Gynecologist to St. Elizabeth's Hospital and to the Boston Dispensary. Octavo, 434 pages, 72 illustrations. New York and London, D. Appleton & Co., 1909. Cloth, $5.00

This is the type of book that is sadly needed in American medical literature, the type which has so greatly enriched that of the Germans. It is essentially a monograph dealing quite exhaustively with the new growths in the kidney region, as described in the literature and exemplified in the pathological museums of the Massachusetts General and Boston City hospitals.

The author adopts a new and somewhat simplified classification, dividing kidney growths into (1) Solid Tumors of the Parenchyma, and subdividing these into malignant and benign; (2) Embryonic Tumors, including dermoids, rhabdomyomata and mixed growths; (3) Tumors of the Renal Pelvis and Ureter; (4) Polycystic Kidney and (5) Simple Serous Cysts. Perineal Tumors and Adrenal Tumors are discussed in separate chapters, as are Actinomycosis and Echinococcus. The final chapter discusses the Determination of Renal Efficiency.

Of the malignant solid tumors of the parenchyma the most important is the hypernephroma, first described by Grawitz in 1883. The author gives a table of 176 case collected from the literature. He believes that they develop from adrenal "rests" in the kidney and thinks that it is best to put them, for the present, in a class by themselves. The other malignant tumors are less important.

There is a table of 100 cases of embryonic tumor, and one of 41 cases of actinomycosis.

The last chapter deals with diagnosis, the author correctly stating that no renal operation should be undertaken until the condition of the supposedly sound kidney has been carefully ascertained. He believes the Luy's segregator to be the best instrument for separating the urine from the two sides, but gives the technic in the use of cystoscopes of various kinds.

The book will prove a most valuable one of reference and should be in the library of every surgeon.

Spondylotherapy. Spinal Concussion of the Application of Other Methods to the Spine in the Treatment of Disease. By Albert Abrams, A. M., M. D. 420 pages with 100 illustrations. San Francisco, The Philopolis Press, 1910. Cloth, $3.50, postage prepaid.

The subject of spinal therapy has been given scant attention by physicians, mainly, because it has been largely exploited by certain schools of practice.

The author in an interesting and instructive book, quite new in this field, has endeavored to elevate the whole subject and place spinal therapy upon a scientific basis. The various visceral reflexes of the author play an important part in the scientific explanation of the subject and are the basis of the practical results to be obtained.

The illustrations are an instructive feature of the work. The book is unique, scientific, and well suited for its purpose.

A Text-Book of the Practices of Medicine. By James M. Anders, M. D., Ph. D., Professor of the Theory and Practice of Medicine and of Clinical Medicine, Medico-Chirurgical College, Philadelphia. Ninth revised edition. Octavo of 1326 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, $5.50 net; Half Morocco, $7.00 net.

Dr. Anders has, in this edition, added considerable matter: Flexner's and Wasserman's sera for cerebrospinal meningitis, pneumococcus meningitis, etc. Also Tucker's Magnesium Sulphate Anæsthesia, the hæmolytic tests in gastric carcinoma, and all the recent work by Wright and others.

Diagnosis and treatment are carefully considered, and definite information as to the treatment given when possible. The type and illustrations are clear, the sheen of the paper not hard on the eyes, and we feel that the edition will receive the same cordial support its predecessors enjoyed.

MEDICINE

Conducted by
W. K. WEST, M. D., Painesdale, Michigan

Pancreatic Internal Secretion—Osborne, in an article on the Internal Secretions, has the following to say on the pancreas:

"Besides the pancreatic secretion which passes through the pancreatic duct, the pancreas furnishes an internal secretion necessary to the health and life of the individual. The pancreatic duct may be tied and the animal live, but the pancreas cannot be removed without death supervening.

"It has been asserted that the internal secretion of the pancreas as well as the secretion through the pancreatic duct is necessary for the proper utilization of foodstuffs. This internal secretion of the pancreas has been positively demonstrated to be necessary for the proper metabolism of carbohydrates, and if this function of the pancreas is interfered with glucose will appear in the urine, and if this function is permanently abolished, diabetes mellitus is the consequence. While glycosuria can occur without any apparent disease of the pancreas and while disease of the pancreas can occur without glycosuria, it seems proved that the disturbance of the internal secretion of the pancreas (whether from actual degeneration of the islands of Langerhans, from reflex nervous disturbances, from abnormal liver conditions, or from disturbed suprarenal activity) will surely cause glycosuria. Hence, a consideration of the carbyhodrate metabolism from the intake of starch to the normal amount of sugar in the blood, and to the normal function of the muscles from glycogen nutrition, must take into account the internal secretion of the pancreas.

"It must be emphasized that the disturbances of the interrelations between the ductless glands, whether by disturbed secretions of one or more of them, or by disturbances due to nervous irritations, reflex or direct, may sufficiently disturb the pancreatic internal secretion to cause glycosuria and yet no apparent disease of pancreas be found on autopsy. Instances of such glycosuria are those that occur from some irritations of the brain, injuries to the fourth ventricle, etc: the glycosuria that often occurs in acromegaly (disease of the pituitary); the glycosuria that often occurs in thyroid disease; and the glycosuria that has been shown experimentally to occur from too much absorbtion of suprarenal extracts.

"Thyroid secretion has been shown to exert profound influence on the secretion of the pancreas. If thyroid activity is insufficient, hypersecretion of the pancreas occurs. If there is excessive thyroid secretion, as in exophthalmic goitre, an under-secretion of the pancreas occurs.

"Disease of the islands of Langerhans in the pancreas always causes diabetes mellitus, unless there is sufficient healthy pancreatic tissue or supernumerary pancreatic tissue to prevent an absence of this secretion.

"While the pancreatic juice may be increased by hydrochloric acid and by secretion, and by various drugs such as creosote and salicylic acid, it is not known how the internal secretion of the pancreas may be increased or diminished.

"Unfortunately the feeding of or any extract made from pancreatic tissue, does not prevent or cure diabetes."—*Journal of the American Medical Association*, February 26, 1910, page 673.

The Treatment of Typhoid by Continuous Saline Instillation—In the *Journal of the American Medical Association*, Dr. David Riesman, of Philadelphia, refers briefly to his experience with proctoclysis in the treatment of typhoid fever. He has had the opportunity to use it in too few cases so far to claim any positive results and says, "It is difficult to see whether or not it shortens the course of a disease. It has seemed to me, however,—and this opinion is shared by my hospital internes—that on account of it we have had recoveries in several desperate cases." He began the use of it in the spring of 1908, and describes his methods as follows: "At first I put the patients in the Fowler position, but found they did not bear this well. They were then left in bed in the recumbent posture. The solution used was the ordinary physiological salt solution and did not contain calcium chloride. No difficulty was experienced in keeping the tube in place without any special device. The solution flowed in so gently that hardly any was expelled. Occasionally a patient would object to the irrigation, but the majority bore it without a murmur. I have generally discontinued the instillation during the night and have persisted in it during the day, with brief interruptions in some instances.

SURGERY

Conducted by

DR. R. E. BALCH, M. D., Kalamazoo, Michigan

Cerebellum and Its Affections—J. S. R. Russell in the *British Medical Journal* has a very complete article on the cerebellum and its affections. Speaking of the symptoms of cerebellar tumors, he lays emphasis upon the following points:

1. Headache. This differs from other forms of intracranial tumor by being especially liable to involve the occipital region and extend down the back of the neck. It may be accompanied by local tenderness over the site of the tumor, or in young children by bulging. The patient holds the head fixed, owing to the severity of the pain. The pain may, however, be referred to the frontal region, especially the contra-lateral frontal region.

2. Vomiting. This is a constant symptom, and is usually both frequent and severe.

3. Optic Neuritis. The author regards cerebellar tumors especially liable to cause early and extensive optic neuritis, leading rapidly to loss of sight and atrophy. He believes the eye in which the neuritis begins or is most intense, to correspond to the side upon which the tumor is located.

4. Disturbances of Equilibrium. Vertigo in some degree is a common symptom, but in the majority of cases amounts only to giddiness. In the severe cases there is a sensation of falling to side, or rotation. External objects seem to move from the side of the tumor to the opposite side irrespective of whether the tumor is intra- or extra-cerebellar. The subjective sensation of rotation, however, does differ according to whether the tumor is extra-medullary or intra-medullary. In the former, or extra-cerebellar, the patient experiences a sensation of rotating from the normal to the affected side; whereas in intra-cerebellar tumors, the opposite is the case. Many patients with intra-cerebellar tumors when in bed, will feel compelled to lie on the normal side; whereas in the extra-cerebellar, they will lie on the side of the tumor. A patient asked to stand with his eyes closed and with his feet together, tends to fall toward the affected side.

5. Gait. The author calls attention to the fact that though the patient usually staggers toward the affected side, knowing this tendency, he may, by over-correcting it, fall to the opposite side.

6. Failure of coordination in the upper extremity is not lessened by the aid of sight as it is in *tabes dorsalis*. The lack of positive control is found in the homolateral limb while the unintentional tremor will be more marked in the contra-lateral limb.

7. Tendon reflexes. The author emphasizes the fact that there is no constancy in the tendon jerks. That in the same patient within a short period of time, the knee jerk may be increased, decreased or abolished.

8. Ocular symptoms. The paralysis of the sixth cranial nerve of the homolateral side causing a deviation of the eye to the contra-lateral side, is present in those cases where the tumor is so situated as to press upon the nerve. Nystagmus is usually present at some time in the course of the case.

9. Paralysis of other cranial nerves is not found in intra-cerebellar growths, but is common in extra-cerebellar growths. The nerves most liable to be involved are the facial and the auditory.

10. Symptoms of tumor of the middle lobe of the cerebellum are the same as those of the lateral lobe except that the incoordination is bilateral instead of unilateral.

Congenital Single Kidney—James M. Anders in the *American Journal of the Medical Sciences* gives some interesting statistics regarding the frequency of congenital single kidney. Two hundred eighty-six cases have been reported in all. The presence or absence of the suprarenal gland was noted in 151 of these. It was present in 109 of these and absent in 42. In 248 cases the sex was mentioned, of which 159 were males and 89 were females. But it must be remembered that autopsies are more common in males than in females. Of 154 cases in which the age at death was given, 34 were under ten years of age; between the tenth and fiftieth year 62 cases occurred, and after the fiftieth year, 58 cases. One of these fifty-eight reached the age of eighty and one reached the age of eighty-eight. There are on record eleven operations of solitary kidney, four nephrotomies and seven nephrectomies. The nephrectomies were fatal in from one to eleven days. It should be remembered that there may be a rudimentary ureter upon the side of absent kidney, which shows that we must obtain urine from this side before operating the other.

NEUROLOGY AND PSYCHIATRY

GEO. M. KLINE, M. D., Ann Arbor, Michigan

Manic Stupor—Added interest for this subject has been aroused since the work of Dreyfus, who, studying Kræpelin's own cases of involution melancholia concluded that they were mixed phases of manic-depressive insanity. To this study Kræpelin has given support.

Kirby does not agree entirely to this conception, believing that it is based too much on recovery from depression and the emphasizing of certain minor features in the symptom complex of involution melancholia and that such a method of analysis permits any functional or non-deteriorating psychosis to be included in the manic-depressive group.

The cardinal symptoms of both the manic and depressive phases are given.

Manic Phase	Depressive Phase
Emotional exaltation	Emotional depression
Psychomotor restlessness	Psychomotor inhibition
Flight of ideas	Retardation of thought

The mixed forms—states in which the elements of one phase replace or combine with certain elements of the other, are classified for purposes of description in two main divisions. 1. States of Emotional Depression with Manic Symptoms. 2. States of Emotional Elevation with Depressive Symptoms.

The first division is separated into two clinical groups: Agitative Depressions and Quiet Depressions with Flight of Ideas.

In the first group, Agitative Depressions, there is a depressed mood with restlessness and agitation, distractibility, flight of ideas or slowness in thinking and restriction in the range of thought.

In the second group, the mood is depressed. There is distractibility of attention and flight of ideas, but no anxiousness as in the preceding group. Patients are sad, some are perplexed. They may speak slowly but are markedly distractible.

The second division—states of Emotional Elevation with Depressive Symptoms—is also divided into two clinical groups: Manic Stupor and Unproductive Mania.

The chief features of Manic Stupor are difficulty of thought, psychomotor inhibition with manic mood of exhilaration. The patients are active, have little or nothing to say, but their facial expression reveals a cheerful mood. These patients may be mistaken for the catatonic form of dementia præcox.

In Unproductive Mania the patients show exhilaration, psychomotor excitement but no speech productivity, sometimes even mutism. They look happy, are restless, busy, mischievous; thinking inhibited.

The writer illustrates each clinical group with cases. He draws attention to a frequent error of diagnosis in young persons where the psychosis is regarded as dementia præcox until later typical manic or depressive symptoms appear ending in recovery.

He believes in keeping separate involution melancholia from the manic-depressive group. Mixed attacks are not often mistaken for dementia præcox, because of the odd clinical picture and reactions that appear inconsistent. —(*Review of Neurology and Psychiatry*, January, 1910.)

Partial Thyroidectomy for Catatonic Praecox—Kanavel and Pollock, as a result of their investigations, give a final report, in the main adverse to the procedure in the treatment of this psychosis. Their findings are at variance to the favorable results obtained in a limited number of cases by Berkley and Follis. The latter, however, now look for improvement and recovery in only a limited number of selected cases, and state that no idea is entertained that thyroidectomy will ever become a panacea for catatonia.

Kanavel and Pollock conclude that thyroidectomy is not justified in any large class of patients, and although improvement may result in a few cases in which the disease is not far progressed and where the thyroid shows changes, nothing definite can be promised for the operation.

They found a complete lack of result in cases that had suffered from the disease over one year. A case operated on and apparently recovered at the time of their preliminary report, has since relapsed and now shows no improvement. They maintain that choice of cases, based on duration of the disease is not scientific because the rapidity of the disease cannot be ascertained. Nor does examination of the blood offer any assistance in the choice of cases.

Because of the frequent occurrence of relapses within five years of cases that apparently recovered, great care must be exercised not to report too early cases cured.—(*American Journal of Insanity*, Jan. 1910.)